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COLONY OF MAURITIUS

BUREAU OF HYGIENE & TROPICAL DISEASES
23 FEB 1937

ANNUAL REPORT

ON THE MEDICAL AND HEALTH DEPARTMENT

1st JANUARY to 31st DECEMBER, 1935

Printed by R. W. Brooks, Government Printer, Port Louis, 1936.

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Corrigendum.

Please read :

Appendix I, printed on pages 58 and 59, should be read immediately after page 35.

Appendix II is printed on pages 36 to 50.

Table II, printed on pages 51 to 54, should be read in connection with page 48 transposing pages 53 and 54.

Appendix IIa is printed on pages 55 to 57.

Appendix XII is printed on pages 118 to 124.

CORRECTION SLIP.

Annual Report, 1934.

(*i*) On page 5 under heading " District Medical Officers," the following addition should be made:—

Savanne: J. Cantin, M.D. (Paris).

(*ii*) On page 23, in paragraph 58, the 3rd and 4th lines of the paragraph should read as follows:—

the number of patients treated in the hospitals of the Colony falling from 27, 689 to 26, 541.

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on the Medical and Health Department,

1st January to 31st December, 1935.

I.—Administration.

Administrative progress has been slow. The fact that certain officers of the Department are employed upon work for other departments is a handicap to flexible administration and to the institution of improvements. Dispensers are employed as Poor Law Clerks; in some cases as Postmasters or Civil Status Officers. Representations have again been made of the inconvenience and loss of efficiency resulting from such arrangements, and there are indications that as the present system for the administration of poor and unemployment relief is inadequate the arrangements made to improve its efficiency will relieve officers of the Health Department from this work and enable them to devote more time to their medical work than they have been able to do in the past.

BACTERIOLOGICAL LABORATORY

2. The establishment of the Bacteriological Laboratory has remained unaltered during the year. It is most unfortunate that it has not been possible to fill the post of Pathologist now borne on the establishment. The Laboratoy Report, which appears herein as appendix II, is a record of much valuable work carried out under unnecessarily unfavourable conditions. Among many interesting features, the work on *T. vivax,* discovered by Dr. Adams last year, is easily the most important. Unfortunately, in the absence of a second Pathologist, the departure of Dr. Adams on vacation leave has interrupted the programme of work which he had tentatively laid down.

3. The discovery of *T. vivax* led to the formation of a technical committee to examine and report upon the significance of this parasite.

The committee was under the chairmanship of the Medical Director The Members were the Director of Agriculture, The Pathologist and the Government Veterinary Surgeon. The Committee held a number of meetings and duly reported. The whole subject of trypanosomiasis in stock in the Colony was reviewed in the light of the available information and recommendations were made according to the conclusions drawn therefrom One point emerged during the discussion of the report and of the Colonial Estimates for 1935–36, which may profitably be examined.

4. When the draft estimates were under discussion in the Legislative Council the need for a second pathologist at the laboratory was challenged by a number of members, who stated that the post was unnecessary. Since the debate revealed that there was a good deal of misapprehension on the subject it may not be unprofitable to discuss briefly the functions of the Bacteriological Laboratory in a Colony as remote from big centres of research as is the case in Mauritius.

5. The Laboratory originally owed its creation to a veterinary problem which necessitated drastic changes in the transport system on estates, the cost of which was formidable. Thereafter circumstances resulted in its work

becoming limited practically to the routine diagnosis of human diseases. At a latter date the chemical analytical work of the Government which had been done by a separate officer was entrusted to the Superintendent who was the only person on the staff with university qualifications. To assist him in the work he was given a number of assistants whom he had first of all to train. As the amount of work increased new assistants under the designation of " students " were employed until in 1931, when this establishment was at its peak, the personnel of the Laboratory numbered twelve under various designations and the cost in personal emoluments of this establishment amounted to Rs. 42,880.

6. It is clear that with both chemical analytical work and routine pathological diagnosis imposed upon one officer there was a limit imposed upon the amout of work which could be undertaken as well as upon the quality of the work done. So far as the amount of work was concerned, the limit was of no practical importance because addition to the number of assistants could keep pace with the increased demand, but the limit imposed upon quality was of great practical importance. It was virtually impossible for the Superintendent under those conditions to embark profitably upon research. That any research work was done at all is a tribute to the keenness and energy of the staff. But though the record of the Laboratory's work during this period inspires respect, it contains little of importance in the way of research into the problems confronting the administration. The important problem of trypanosomiasis does not appear to have been the subject of further enquiry after the work undertaken by Lafont on *T. evansi* had been completed.

7. When the opportunity occurred for the reorganisation of the Laboratory it was manifest that conditions had so changed as to make the existing form of organisation quite useless. Developments in chemistry, bacteriology and pathology had become so extensive as to be quite beyond the scope of one officer. The chemical analytical work was therefore organised as a separate branch of the Laboratory's activity and placed under a trained analytical chemist who was provided with an assistant. The staffing of the pathological section involved a consideration of what should be the function of the Laboratory in the Colony. Should it confine itself merely to routine pathological diagnosis or should it, in addition, occupy itself with research ? Further, should it confine itself to the pathological problems of human beings or should it embrace veterinary pathology as well? These questions had all to be considered before an establishment could be devised.

8. The dissociation of research from routine work would be a mistake because it is logical to enquire about the cause in relation to the effect. An institution whose policy is to deal solely with effects cannot be expected to contribute much to progress, and progress can not be made in the elucidation of local problems unless the causes are studied locally. To obtain the full usefulness of the laboratory it was therefore necessary to envisage the enlargement of its scope so as to include research into local problems.

9. The next point for consideration was the type of research likely to be necessary. At the time the laboratory was under consideration there was still the unsolved problem of schistosomiasis. The investigation of this problem requires a period of research in the laboratory to be followed by investigations in the field. Since investigation in the field would mean the absence of the Pathologist from the laboratory possibly for days at a time it was thought necessary to provide assistance to the pathologist to ensure

that the routine work of the laboratory would not suffer from the absence of the senior officer. Moreover, since provision should be made for the pathologist's periodical vacation leave it was thought that a university graduate rather than a number of locally trained assistants would provide the optimum establishment. An establishment was therefore devised which provided for two university graduates rather than a number of locally trained assistants whose sphere of usefulness could only be extremely limited.

10. It was proposed that the new organisation should be given effect as a whole but certain objections were raised on grounds other than technical which resulted in the peculiar hybrid establishment shewn for the Laboratory at present, which is a mixture of the old organisation and the new, containing most of the disadvantages of the old and few of the benefits of the new. Nevertheless the staff have been able to carry out important work. But the hampering effects of the absence of a second pathologist are already manifest. Important work on the epidemiology of schistosomiasis has not been pursued simply because the pathologist has been obliged to give most of his time to laboratory work and on this account has not had time for the extension of the investigation to the field. The work on trypanosomiasis has been temporarily discontinued. Had a second pathologist been available during the past year it is probable that both these promising lines of research would have been steadily pursued.

11. The part played by the Laboratory in the recent investigation into trypanosomiasis in stock has raised the question, previously left in abeyance, whether or not the laboratory should concern itself with veterinary problems.

12. The Government Veterinary Department is very badly handicapped through having no pathological laboratory service of its own. It is difficult to understand how the control of disease in stock can be intelligently applied in the absence of such a service, and the officers of the Veterinary Division would be the first to acknowledge this. In fact they have occasionally appealed to the laboratory in the past for the eludication of certain problems, the most striking and important of which was the outbreak of contagious abortion in cows in the Government Dairy. The question therefore resolves itself into a choice between the establishment of a veterinary laboratory and the extension of the scope of the Bacteriological Laboratory to include the study of veterinary problems.

13. A number of considerations favour the adoption of the second course. In the first place the staff recommended for the Laboratory could probably undertake veterinary work for some years to come without having to be increased. We have seen that the second pathologist is necessary for the proper working of this institution whether it includes veterinary problems within its scope or not. The second consideration is that the existing institution is fully equipped to deal with general pathological problems so that by including in its scope veterinary work, the need for the duplication of apparatus would be avoided. The third consideration is the difficulty in the recruitment of a suitable staff. In my opinion to place other than a well trained and experienced officer in charge of the laboratory services is a sheer waste of time and money. Such an officer in order to be induced to take the appointment, and order to be induced to remain in it, must be offered conditions of service which are at least as attractive as are those offered by other colonies. The present conditions do not comply with this requirement. But we must remember that the state of the Colony's finances still compels rigid economy and that it is cheaper to improve the conditions of service of two officers than to provide attractive emoluments for three.

Moreover the prospect of successful recruitment under present conditions seems to be extremely remote. I am assuming that the employment of overseas candidates is necessary.

14. The necessity for the employment of overseas candidates may not receive acknowledgment from those who believe that posts in the Government service should be filled by Mauritian candidates. So far as these scientific posts are concerned, however, the prospect of obtaining a fully trained and otherwise suitable officer of local origin is extremely remote. The minimum period of training necessary for such an appointment would be, in my opinion, three years spent in one or two large European laboratories, one of which would be conducting research into tropical problems. The expense of such training is considerable and no person would undertake it unless he was given a guarantee that he would find employment at the end of it. This would be an extermely risky thing to do, since the value of an officer does not lie in the training he has had but in the use he makes of it, and this can be determined only after he has had considerable experience. This last consideration also contains the reason for the undersirability of extending the scholarship of one of the successful candidates for the English Scholarship.. Lack of originality, of judgment, or of the critical faculty might render a fully trained candidate quite unsuitable to take charge. So far as this institution is concerned, I think the fact must be faced that a non-mauritian staff will be necessary and that if such a staff is to be recruited and kept, improvement in the conditions of service is imperative.

15. If we are to have light thrown upon local biological problems we must be prepared to depend upon our own resources. The Colony is too far distant from the more important centres of research to be able materially to benefit from their work. Therefore the local staff must be of a satisfactory standard, and this appears to be possible only by the employment of officers from overseas, in the meantime at least. It may be thought that I am giving undue prominence to this subject but a study of the published reports of the Laboratory's work for the past two years gives ample indication of the potentialities, at present more or less latent, of this institution for the elucidation of problems on whose ultimate solution important events may depend.

HEALTH CENTRE SYSTEM

16. The increase in the poor and unemployment-relief work, much of of which is done by the Government Medical Officers and Dispensers in the rural districts, has prevented any progress from being made in the fundamental reorganisation represented by the Health Centre System. To those who imagine this to be the age of speed it may come as a surprise to know that this type of organisation was first described in 1928 in a report submitted by me to the members of a commission of enquiry upon the Department. It was subsequently published. A number of other places have found it possible to adopt this type of organisation and have found in it a satisfactory contribution to the problem of providing a health organisation in rural areas. The arrangements to which reference has been made in paragraph 1 of this report will eventually enable the system to be applied in the rural districts of the Colony. It is fully realised that the adoption of this system will throw a good deal upon the Medical Officers in charge of the rural districts as well as upon the subordinate staff. But there is no doubt that if they can rise to the demands imposed by it they will find as time goes on and they become familiar with its working that they have a better administrative instrument at their disposal than they had in the past.

MISCELLANEOUS

17. Minor administrative improvements have been effected. Authority has been obtained for a regrading of the posts of Sanitary Inspector which will eliminate an undesirable bottle-neck which was causing useless stagnation in lower grades.

Adjustments have been made to the nursing staff of the Mental Hospital, and a number of new posts have been filled in the general nursing service. The salaries of the general nursing service have been revised in minor details which have meant a slight improvement in the conditions of service. In fact the work of organising the nursing service is nearly, but not quite completed.

LEGAL

18. No ordinance of Public Health importance was enacted during the year.

19. Two Government Notification were made; G.N.2 of 1925; amending the rates of charges for the admission of patients to the Mental Hospital; and No. 7 of 1935; Regulations made under the Dangerous Drugs Ordinance No. 5 of 1934 requiring the surrender to the Medical Director for destruction of all stocks of coca leaves held by persons in the Colony.

FINANCIAL

20. The normal revenue of the Colony for the financial year 1934-35 was	Rs. 15,081,864.01
The expenditure on Medical and Sanitary Services (including municipal expenditure under this Department's control) out of the Revenue was	1,584,403.85

II.—Public Health.

21. The drought which occurred in 1934 and had such a disastrous effect upon the sugar crop was followed by conditions which ensured a bumper crop during 1935. As these conditions included generous and well distributed rainfall it was expected that an increase of malaria would be recorded towards the end of the year. This expectation was not generally fulfilled, though the district of Grand Port shewed an increase. The Death Rate was a little higher at 26.5 per 1,000 of the population as compared with 25.7 per 1,000 for 1934. The Birth Rate was about the same; 33.6 per 1,000 as compared with 34.5.

22. One would imagine that a prolonged period of financial depression such as the Colony has experienced and is still undergoing would be reflected in the vital statistics, which might reasonably be expected to deteriorate materially concurrently with the progress of the depression. The reverse has, rather surprisingly, held good. The reason for the apparent anomaly is obscure. It is possible that the effects of the depression have not been felt to the same extent by the labouring classes as they have been by others, and the economic adjustments required by it have possibly not been so great. Unemployment has not been operative in the agricultural classes. It has been by no means general. There is actually a growing scarcity of agricultural labour, which during harvest time becomes acute. The unemployment problem appears to exist only in artizan occupations and in the growing class of applicants for clerical and similar work where the number of posts cannot possibly satisfy the demand.

23. There is an increase to be recorded in the number of cases of malignant disease admitted to the public hospitals. 185 were admitted during 1935 as compared with 142 in the previous year. The distribution of these tumours is as follows. The numbers in parenthesis are the figures for 1934 included for comparison.

Female genital organs and breast	117 (97)
Stomach and liver	15 (8)
Peritoneum and intestinal tract	12 (10)
Buccal cavity	11 (7)
Skin	18 (10)
Site not specified	12 (10)
The non-malignant new growths numbered ...	54 (91)

The total number of deaths in the Colony from Cancer and other tumours is reported by the Registrar General to be 67 (70).

COMMUNICABLE DISEASES

(A) INSECT-BORNE DISEASES—MALARIA.

24. The total number of patients suffering from Malaria admitted to the hospitals was 2,796, an increase of 73 over the figure for the previous year. The case mortality was 3.72%.

The following tabular statement shows the admissions for malaria and deaths ascribed to it during this and the preceding year:—

Institutions	Admissions		Deaths	
	1934	1935	1934	1935
Civil Hospital	852	616	18	35
Port Louis Prison Hospital ...	40	75	—	—
Long Mountain Hospital ...	329	303	9	13
Poudre d'Or Hospital	169	106	4	5
Flacq Hospital	346	446	14	14
Mahebourg Hospital	173	344	5	14
Souillac Hospital	294	224	5	3
Victoria Hospital	354	403	18	11
Beau Bassin Prison Hospital ...	27	50	—	—
Moka Hospital	114	194	6	9
Mental Hospital Infirmary ...	21	22	—	—
Barkly Industrial School Hospital...	4	13	—	—
Total ...	2,723	2,796	79	104

The total number of deaths in the Colony from malaria and malarial cachexia, 2,300, is equivalent to a death rate of 5.83‰ living. The rate for 1934 was 4.80‰.

25. Dr. H. André, M.B.E. who is working on limited "Health Centre" lines in the District of Pamplemousses records the following splenic indices among the school children examined by him during the half year ended 31st December, 1935.

Area	Number examined (a)	Number with enlarged Spleen (b)	Spleen rate $\frac{b \times 100}{a}$
Long Mountain ...	510	108	21.17
Pamplemousses ...	344	94	27.34
Terre Rouge ...	204	90	44.11
Bon Air	625	30	4.80
Whole District ...	1,683	322	19.13

PLAGUE.

26. No case of plague occurred during the year.

The plague-preventive work carried out is recorded in the report of the Medical Officer of Health, Port Louis. (Appendix V).

TYPHUS FEVER.

27. This disease does not appear to exist in Mauritius. I am unaware that any indigenous case has been recorded within modern times. The disease has been the subject of special attention since 1928, when a Mauritian passenger to Durban fell ill in that port with a febrile complaint which was diagnosed as typhus fever. If the diagnosis was correct the patient had presumbably contracted the disease in Mauritius. Close enquiry failed to reveal any case among possible contacts residing on the premises formerly occupied by the patient. Nevertheless since then officers of the Department have been on the look out for indigenous typhus but so far it has not been detected.

(B).—INFECTIOUS DISEASES

SMALL POX.

28. There has been no small-pox in the Colony since 1913. 9,286children were vaccinated during 1935 by the Public Vaccinators. The data are given hereunder:—

Successful vaccinations on 1st attendance	7,962	
Successful vaccinations on 2nd and subsequent attendances...	793	
		8,755
Unsuccessful vaccinations		489
Vaccinations in which the results could not be obtained ...		42
Total ...		9,286

The proportion of children vaccinated by Government Vaccinators to live births is 70.1%

ENTERIC FEVER.

29. The number of cases of Enteric fever notified to the Sanitary Authority is shewn in the following table.

ENTERIC FEVER FOR THE YEAR 1935.

Districts	January	February	March	April	May	June	July	August	September	October	November	December	Total
Port Louis ...	1	3	1	1	—	—	1	—	—	—	1	—	8
Plaines Wilhems ...	7	3	3	3	—	—	3	6	1	5	2	6	39
Moka	—	—	1	—	—	—	—	—	—	—	—	2	3
Pamplemousses ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Rivière du Rempart	—	—	—	—	—	—	—	—	—	—	—	—	—
Flacq	—	—	—	—	—	—	—	1	—	—	—	1	2
Savanne ...	2	—	1	2	1	—	—	—	—	—	2	—	8
Grand Port ...	—	—	1	—	—	—	—	—	—	—	—	—	1
Black River ...	—	—	—	—	—	—	1	—	—	—	—	—	1
Total ...	10	6	7	6	1	—	5	7	1	5	5	9	62

These are the figures of cases notified to the Sanitary Authority. It is clear that they give little indication of the actual amount of the disease present in the Colony.

DIPHTHERIA. ...

30. 17 cases of Diphtheria were notified in 1935.

PUERPERAL STATE.

31. 154 deaths were registered as being due to the puerperal state. The deaths are classified as under:—

Puerperal albuminuria and convulsions	15
Puerperal hæmorrhage	5
Puerperal sepsis	25
Other accidents of pregnancy	4
Other accidents of childbirth...	103
Puerperal tetanus	1
Other or unspecified condition of puerperal state (puerperal mania)	1

21 cases of puerperal septicæmia, of which 10 proved fatal, were treated in hospitals—a case mortality of 47.6%.

The maternal mortality rate (the ratio of the number of deaths ascribed to the puerperal state to the total number of births including still-births) was 10.58‰ in 1935 as compared with a rate of 12.00‰ for the previous year.

ERYSIPELAS.

32. 85 cases were notified, compared with 68 in 1934. 18 deaths were registered.

TUBERCULOSIS.

33. Out of the 10,445 deaths of 1935, 336 were due to tuberculosis giving a death rate of 8.5 per 10,000 inhabitants.

LEPROSY.

34. The report on the work of the Leprosy Board and of the Leper Hospital appears in Appendix VII.

CHICKEN POX.

35. 5 cases of this disease were treated : 4 at the Barkly Industrial School Hospital and 1 at the Case Noyale Dispensary.

VENEREAL DISEASES.

36. 239 cases of Syphilis, with 7 deaths, were admitted to the hospitals during the year. 226 cases of Gonorrhoea were treated and 181 cases of soft chancre.

37. Mauritius is a signatory to the International Agreement signed at Brussels in 1924 respecting facilities to be given to merchant seamen for the treatment of venereal diseases.

This agreement provides for the free treatment of seamen suffering from venereal disease. The treatment is open to all merchant seamen or watermen without distinction of nationality.

Treatment cards drawn up in the form of the model indicated in the agreement are issued to seamen coming for treatment for the first time. On the card is recorded a short clinical account of the case; the diagnosis; the treatment carried out at the centre; indications for treatment on the voyage and the results of the serological examination undertaken in cases of syphilis.

The only difference between local practice and the requirements of the agreement is that the Kahn test is now used instead of the Wassermann reaction in the serological diagnosis of syphilis.

The treatment centre is situated at the Civil Hospital, Port Louis, within easy reach of the harbour. It is open daily, Sunday excepted, from 8 a.m. to 5 p.m.

Hospital cases are accommodated in the hospital.

(C).—HELMINTHIC DISEASES

ANKYLOSTOMIASIS.

38. References to this condition are to be found in Appendix III.

The number of cases treated at the hospitals and dispensaries was 22,048 and the number of deaths in hospitals due to hookworm disease was 99.

SCHISTOSOMIASIS.

39. 50 cases of Schistosomiasis were treated in the hospitals during the year, and 230 at the dispensaries.

(D).—DEFICIENCY DISEASES

40. The following deficiency diseases were recorded during the year.

CASES OF DEFICIENCY DISEASES TREATED IN HOSPITALS, 1935.

	Scurvy	Rickets	Beri-Beri	Avitaminosis "A"
Civil	—	—	3	—
Flacq	—	—	3	—
Mahebourg ...	—	6	—	—
Mental ...	—	—	1	—

DISPENSARIES.

(The figures for the dispensaries represent the number of attendances—not cases).

	Scurvy	Rickets	Beri-Beri	Avitaminosis "A"
Brisée Verdière ...	—	2	—	—
Rivière Sèche ...	—	—	2	—
Long Mountain ...	—	1	—	—
Rose Belle ...	—	5	—	—
Vacoas ...	1	—	—	—
Eastern ...	—	—	—	39

41. With regard to the heading Avitaminosis "A," it was recorded in last year's Annual Report that Dr. Y. Cantin, Medical Superintendent of the Civil Hospital, recognised a papular skin condition in a negro girl as being a manifestation of Vitamin A. deficiency. Two more cases were discovered following on the recognition of the original case. After I had seen the patients in consultation with Dr. Cantin I circularised the Medical Officers and Medical Superintendents, giving them the following brief description of the condition:—

> "In the first of the cases recognised by Dr. Cantin it was the skin eruption which led to the diagnosis being made. Further investigation gave a history of a slight degree of impairment of vision at night, and there was some conjunctival injection on the outer half of the eyeball spreading inwards in a narrow band towards the iris. A yellowish tinge of the scleral conjunctiva was also noticeable. The patient complained of lassitude but appeared to be otherwise normal.
>
> The skin condition manifested itself as a papular eruption of fairly definite distribution. The rash was confined practically to the limbs and back of neck, the trunk being free. On the legs it was worst on the outer sides of the thighs and calves where the papules were set fairly close together. Over the buttocks they were more discrete, the intervening skin being apparently healthy but unduly dry. On the arms the rash extended from the wrists to the insertion of the deltoids; was practically confined to the exterior surfaces, and the papules were smaller and more discrete than on the legs. The rash stopped rather abruptly at the wrists and ankles. There were a few papules on the neck, and one or two over the malar region.
>
> The papules were spherical, about 1 mm. or less in diameter, rough to the touch and hard. They were deeply pigmented, of a leaden colour, and the surface of the larger looked as if it were polished. The patient did not complain of itching and there was no evidence of scratching."
>
> No cases answering to this description were recorded from the districts.

42. The number of attendances recorded for the Eastern Dispensary, Port Louis, represent a smaller number of patients. The Medical Officer in charge informs me that there are included in the returns reappearances of the same patient. He is, unfortunately unable to state the actual number of patients concerned.

VITAL STATISTICS.

43. The Vital Statistics of the Colony are now calculated on the basis of the number of the population on the 30th June of the year under reference.

Actual Population of Mauritius on the 30th June, 1935.

Districts		Area in square miles.	Total Popul-ation.	Density per square mile.
Port Louis	...	16	54,937	3,433.56
Pamplemousses	...	69	35,324	511.94
Rivière du Rempart		57½	31,555	548.78
Flacq ...	...	115	51,422	447.14
Grand Port	...	101	47,697	472.24
Savanne	...	93½	30,191	322.89
Plaines Wilhems	...	78	100,195	1,284.55
Moka ...	...	89	29,553	332.05
Black River	...	101	13,441	133.07
Grand Total	...	720	394,315	547.65 (mean)

The chief feature of interest here is the high density of population: 547.65 per square mile.

Marriages.

44. 1,651 marriages were celebrated in 1935 as compared with 1,767 in 1934; showing a decrease of 116. This is equivalent to a marriage rate (number of persons married to every thousand of population) of 8.4‰ against 9.0 in 1934.

Births.

45. The total number of births for the year was 13,246 (6,791 males and 6,455 females) 4,498 of these occurred in the General, and 8,748 in the Indian population. The birth-rate was 33.6 against 34.5‰ in 1934.

The District birth-rate and the five-year mean rate are as follows:

Districts		1931	1932	1933	1934	1935	Mean
Port Louis	...	33.1	29.2	37.3	38.5	38.4	35.30
Pamplemousses	...	23.2	18.7	28.5	36.9	38.1	25.02
Riviere du Rempart		29.9	25.8	44.1	36.9	38.1	34.96
Flacq ...	...	26.6	20.9	29.4	29.8	28.8	27.10
Grand Port	...	27.6	24.9	33.8	35.5	33.5	31.06
Savanne	...	28.2	22.6	31.6	33.9	32.5	29.76
Plaines Wilhems	...	35.6	32.2	38.0	37.3	35.9	35.80
Moka ...	...	31.6	29.0	34.2	35.0	31.0	32.16
Black River	...	26.2	20.5	26.5	28.4	26.0	25.52
Whole Colony	...	30.2	26.2	34.7	34.5	33.6	31.84

Deaths.

46. During the year 1935, the total number of deaths was 10,445 (5,388 males and 5,057 females); 2,954 in the General and 7,491 in the Indian population. This number is an increase of 376 over the total deaths of 1934.

The death-rate for the Colony was 26.5 compared with 25.7 ‰ for 1934 and with 32.06 ‰ for the quinquennial period preceding 1935. The month of maximum mortality was May, whilst in 1934 the months were May and June.

The following table shows the district death-rate yearly for the five yearly periods 1931–1935 and the average rates for the same period:

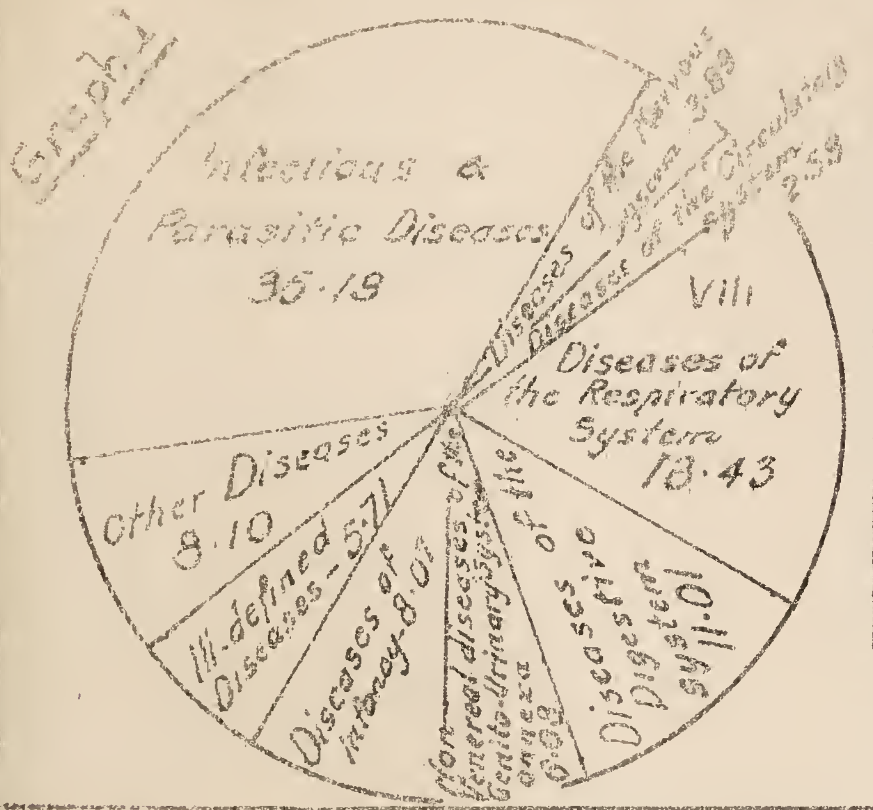
Districts	1931	1932	1933	1934	1935	Mean
Port Louis ...	38.6	33.6	28.1	25.9	31.0	31.44
Pamplemousses ...	46.6	37.1	30.3	28.3	28.6	34.18
Rivière du Rempart	45.6	29.6	24.2	22.5	20.7	28.52
Flacq	46.7	32.7	29.0	25.4	33.1	33.38
Grand Port ...	44.2	37.3	30.8	29.7	30.9	34.58
Savanne ...	44.7	39.3	31.5	30.6	25.2	34.26
Plaines Wilhems ...	25.8	24.7	21.6	21.2	19.9	22.64
Moka	34.7	32.7	28.6	28.0	25.3	29.86
Black River ...	47.2	51.0	33.5	29.1	29.5	38.06
Whole Colony ...	39.1	32.8	27.3	25.7	26.5	30.28

The death-rate for Plaines Wilhems is the lowest death-rate of all the districts of the Colony.

47. The next table, with the figures of 1934 inserted for purpose of easy comparison, exhibits the causes of deaths and rates classified according to the "Manual of International List of Causes of Death" adopted by the Registrar General of England. (Based on the 4th Decennial Commission, Paris, 1929).

Group	No. of deaths 1934	No. of deaths 1935	Rate per ‰ 1934	Rate per ‰ 1935
1. Infectious and parasitic diseases ...	3,562	3,774	9.1	9.6
2. Cancer and other tumours	70	67	.2	.2
3. Rheumatism, diseases of nutrition, etc.	135	135	.3	.2
4. Diseases of the blood and blood-forming organs	129	113	.3	.3
5. Chronic poisoning	3	3	.0	.0
6. Diseases of the nervous system and sense organs	374	406	1.0	1.0
7. Diseases of circulatory system ...	253	271	.6	.7
8. Diseases of the respiratory system ...	1,661	1,926	4.2	4.9
9. Diseases of the digestive system ...	1,216	1,150	3.1	3.0
10. Non-venereal diseases of genito-urinary system and annexa	651	630	1.7	1.6
11. Diseases of pregnancy and child-birth	178	154	.4	.4
12. Diseases of the skin and cellular tissue	37	36	.1	.1
13. Diseases of bones and organs of locomotion	4	3	.0	.0
14. Congenital malformations	3	4	.0	.0
15. Diseases of infancy	855	843	2.2	2.1
16. Senility	179	186	.5	.5
17. Deaths from violence	144	147	.4	.4
18. Ill-defined causes	615	597	1.6	1.5
	10,069	10,445	25.7	26.5

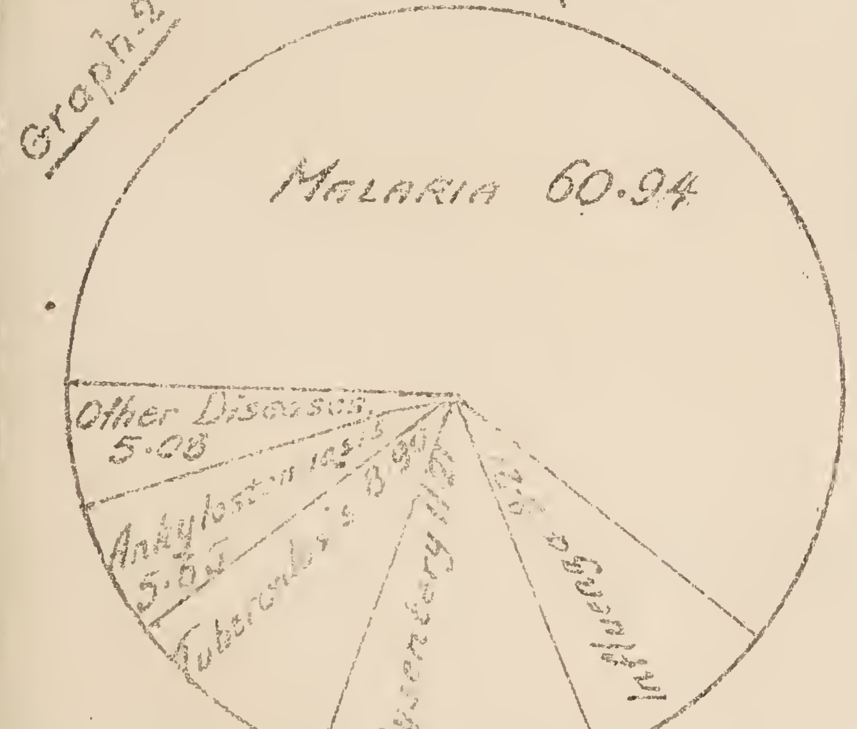
Percentage Classification of
TOTAL DEATHS (10445)
from Registrar General's Report



Other Diseases

II	Cancer & other Tumours	·64
III	Rheumatism, Diseases of Nutrition, etc.	1·29
IV	Diseases of Blood & Blood-forming Organs	1·08
V	Chronic Poisoning	·03
XI	Diseases of Pregnancy & Child-birth	1·47
XII	Diseases of Skin & Cellular Tissues	·34
XIII	Diseases of bones & Organs of Locomotion ...	·03
XIV	Congenital Malformations	·04
XV	Senility	1·78
XVII	Deaths from Violence	1·40
	TOTAL	8·10

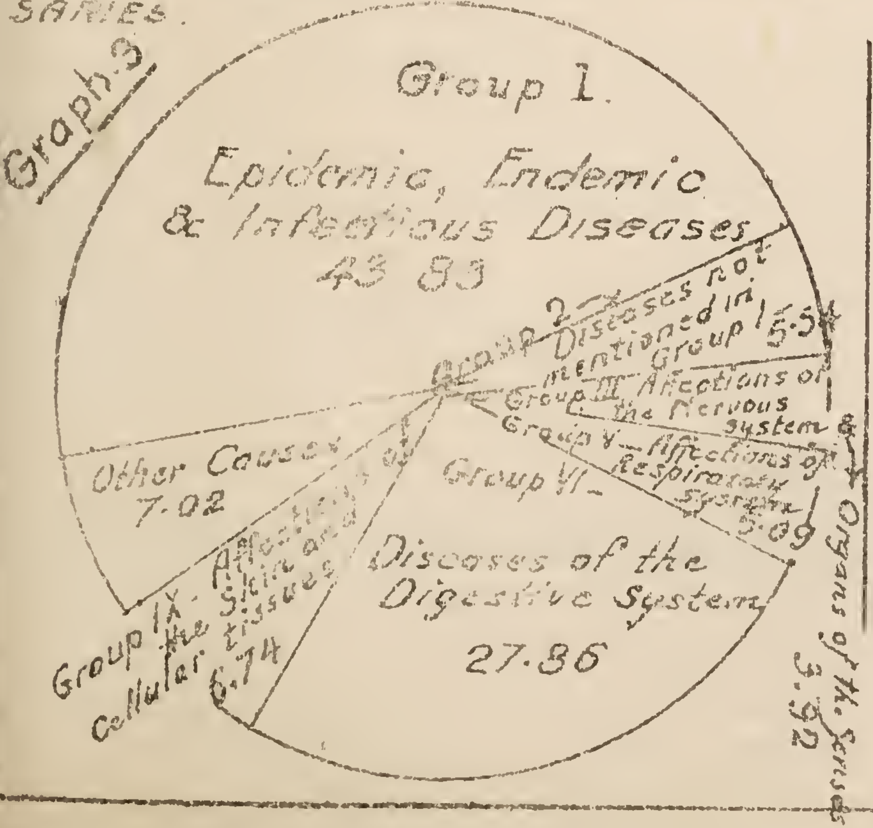
Percentage Classification of
DEATHS DUE TO INFECTIOUS &
PARASITIC DISEASES (TOTAL 3774)



Other Diseases

Typhoid Fever	·58
Diphteria, Erysipelas, Acute Poliomyelitis, Encephalitis Lethargica, Tetanus, Leprosy, Syphilis, Other Venereal Diseases, Septicaemia, Pyaemia. Other Diseases due Helminths, Mycosis, Black-water Fever	4·51
TOTAL	5·09

Percentage Classification of
DISEASES IN OUT-PATIENT POPULATION TREATED AT PUBLIC DISPENSARIES.



Other Causes

Affections of the Circulatory System	1·65
Diseases of the Genito-Urinary System (non-venereal) ...	2·48
Puerperal State	·18
Diseases of the bones & Organs of Locomotion	·29
Diseases of Infancy	·10
Affections of Old Age	·32
Affections produced by external Causes	1·67
Ill-defined Diseases	·33
TOTAL	7·02

The more notable causes of deaths were as under:—

Diseases	No. of deaths 1934	No. of deaths 1935	Rate per ‰ 1934	Rate per ‰ 1935
Malaria and Malarial cachexia ...	1,884	2,300	4.80	5.83
Pneumonia, broncho and lobar—	1,123	1,270	2.86	3.22
Influenza	230	310	.58	.78
Diseases of early infancy* ...	855	843	2.18	2.13
Phthisis and tuberculosis	345	336	.88	.85
Diarrhœa and enteritis	1,028	943	2.62	2.39
Bronchitis	413	484	1.05	1.22
Old age and debility	546	531	1.39	1.34
Dysentery	682	423	1.74	1.07
Albuminuria, nephritis and uræmia ...	632	600	1.61	1.52
Heart diseases (organic)	182	201	.46	.51
The puerperal state	178	154	.45	.39

INFANTILE MORTALITY.

48. The infantile mortality rate is the number of deaths of infants under one year of age occurring in any year for every thousand live births registered during the same year.

The death-rate for 1935 was 139.4 ‰ as compared with 129.77 ‰ for 1934.

The deaths under 5 years were distributed as follows:—

	Males	Females	Total
Under 1 year	1,019	828	1,847
1 year and under 2 years	198	186	384
2 years and under 3 years	147	162	309
3 years and under 4 years	73	84	157
4 years and under 5 years	47	57	104
	1,484	1,317	2,801

The following table shows the grouping of these deaths according to the causes inscribed on the death certificates:—

Causes of death	Under 1 year	1 to under 5 years
Infectious and Parasitic diseases	411	432
Rheumatism, Diseases of nutrition etc.	19	19
Diseases of the blood and blood-forming organs ...	4	2
Nervous system and organs of special senses ...	44	55
Diseases of Circulatory system	3	2
Diseases of Respiratory system	266	154
Diseases of Digestive system	218	196
Diseases (non-venereal) of the genito-urinary system and annexa	4	16
Diseases of the skin and cellular tissue	5	3
Diseases of Bones and organs of locomotion ...	—	1
Malformations	4	—
Diseases of early infancy	843	—
Affections produced by external causes	5	18
Ill-defined causes	21	56
All causes ...	1,847	954

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* Or 63.64 per ‰ live births registered during 1935, against 63.25 per ‰ for the previous year.

The distribution of the deaths attributed to the diseases of early infancy and a comparison of these figures with those of 1934, is shown below:—

Designation of Diseases and accidents	1934	1935
Infantile debility	762	746
Premature birth	80	87
Atelectasis	8	2
Injuries at birth	1	2
Diseases of umbilicus	1	3
Pemphigus neonatorum	2	—
Icterus neonatorum	—	3
Cyanosis	1	—
Total ...	855	843

STILL-BIRTHS.

49. A still-birth is defined by the Registrar General as "a child born dead at or after the seventh month of pregnancy."

The number of still-births registered during 1934 and 1935 is as under:—

Districts	1934	1935	1934	1935	1934	1935
	Males		Females		Total	
Port Louis ...	93	92	76	92	169	184
Pamplemousses ...	50	53	40	41	90	94
Rivière du Rempart	57	52	39	41	96	93
Flacq ...	104	110	76	88	180	198
Grand Port ...	99	92	103	96	202	188
Savanne ...	87	66	65	52	152	118
Plaines Wilhems ...	172	169	111	124	283	293
Moka ...	61	62	45	46	106	108
Black River ...	17	14	12	11	29	25
Total ...	740	710	567	591	1,307	1,301

It is equivalent to 9.82% of live births, for the same period as compared with 9.67% for 1934.

The still-births are distributed as follows for the two great classes of the population:—

	Males	Females	Total
General population ...	172	125	297
Indian population ...	538	466	1,004
	710	591	1,301

III.—Hygiene and Sanitation.

INSECT-BORNE DISEASES

MALARIA.

50. Enough has been written in previous annual reports on the general situation regarding malaria to necessitate only a brief review of the year's work here.

51. In the coastal lowlands where the disease is endemic, existing drains, channels and other effective works have been maintained. For a definition of what constitutes maintenance: see the Annual Report for 1934 page 14 paragraph 33.

52. In Port Louis a number of intra-urban stream-beds were repaired as a measure of unemployment relief. In some cases earthen banks, subject to serious erosion by flood waters, were protected with reinforced concrete walls, while the stream-beds were excavated and floored with reinforced concrete. On account of seepage water, it was necessary to include a number of weep-holes in this concrete flooring and as these readily fill with water their supervision is providing a problem of its own. Anophelines have been found breeding in the water which accumulates in them and it is necessary to have them regularly patrolled. Nevertheless, this work has been of distinct advantage.

In addition to the abovementioned work a considerable amount of repair has been carried out by the staff of the Medical Officer of Health, Port Louis.

53. *Plaines Wilhems-Moka area.*—This is comprised in the area within the 600 foot contour and is the only region in the Colony in which anti-mosquito work is being actively pursued. The report of the Malaria Branch, printed as Appendix IV to this report gives the details of the work carried out in this region during 1935.

54. The Curepipe area seems to be under satisfactory control and it appears that this township is now reaping the benifit of the drainage and canalisation works carried out in the past six years.

55. Vacoas-Phoenix may be described as an area in which the villages themselves are healthy, but are surrounded by a zone of malarious country. The puzzling feature about malaria in this region is that though potential breeding places are numerous enough, it is a matter of difficulty to discover any anophelines at all.

56. In lower Plaines Wilhems and Moka the numbers of water nuisances increase and as these regions seem to be more suitable climatically for the breeding of anophelines, mosquito control is more difficult. Rather surprisingly, on the basis of the spleen rates, lower Plaines Wilhems can be classified as a healthy area in the nomenclature of the Central Committee for the study of Malaria in India. This gratifying state of affairs can, however, only be maintained by constant supervision on the part of the Government and of the willing cooperation of the inhabitants in the task of reducing artificial water nuisances to a minimum.

57. *Moka.*—Towards the end of the year a sharp outbreak of malaria occurred in the Moka District. Cases first appeared in the village of Martindale and from there the outbreak extended in an easterly direction. Measures have been taken for a survey and a clean up of the affected regions.

PLAGUE.

58. Though there has been no plague in the Colony since 1927 plague preventive measures still claim a relatively large amount of the attention of the Department of the Medical Officer of Health, Port Louis.

59. Two importations of the disease in the past, the first in 1899 and the second in 1921 were sufficiently disastrous to cause the population of the Colony to determine to avoid a recurrence, by every available means. In considering this subject the proximity of the Colony to vast territories in which the disease is endemic should always be borne in mind. The policy of the Department is to apply strictly whatever lawful measures it can to prevent the introduction of the disease from abroad, and to take such measures in the port and town of Port Louis to minimise the risk of the disease becoming endemic in the unfortunate event of its having been able to evade the sanitary cordon represented by the quarantine measures.

60. During the past year efforts have been directed towards a further curtailment of the food available to domestic rats. The rat-proof granary has replaced the insanitary grain stores which at one time used to exist. A limited number of wholesale dealers have constructed rat-proof accommodation for the storage of grain in excess of the statutory quantity of 30 bags. During the year the subject of the storage of grain in retail shops was considered, but it was not found possible to devise a cheap and effective bin for this purpose. The subject is still being pursued with some prospect of success.

61. The surveillance of the rats in the port area has been conducted on the usual lines. 11,429 rodents were trapped and 5,864 of these examined for plague infection.

No plague-infected rodent was discovered.

It has become abundantly apparent that the unaided efforts of the citizens in controlling rat infestation on their premises have been a complete failure. Rats are becoming progressively more conspicuous in the town generally. Part of this may be due to the scattering effect of the suppression of the old grain stores, but there seems to be little doubt that an actual increase in numbers has taken place. It has therefore been decided to provide in the Estimates for 1936–37 under the head " Municipal Services " for a rodent destruction staff which will, in future, in all probability, be required as a permanent feature of the Municipal Establishment.

HELMINTHIC DISEASES

ANKYLOSTOMIASIS.

62. With the passage of time, hookworm disease in the Colony is becoming more and more a domestic problem, and the movement of labour away from estate camps to villages and other collections of habitations is intensifying the difficulty of dealing with it. Primarily, as a measure of economy, the Sanitary Staff of the Department has been drastically reduced. In addition to this handicap, the lack of suitable candidates has prevented the filling of vacant posts of even this reduced establishment so that the sanitary " control " of much of the rural part of the Colony is practically non existent. There is also the added handicap of the ingrained conservatism of the Indian agricultural labourer to contend with, and any change in this factor is unlikely so long as the sugar industry remains in its present depressed condition. The only direction in which the problem can be approached is that of palliation by means of the treatment campaign.

63. The Report of the Senior Medical Officer in charge of this campaign is printed as Appendix III, and it records how the addition to his staff of one Medical Officer and three field men has enabled a treatment campaign to be conducted in the Northern Districts where no treatments on a large scale had been given since 1928.

SCHISTOSOMIASIS.

64. The Pathologist's Report records the completion of the laboratory aspects of this problem. The local helminth is *S. hæmatobium* and the intermediate host *B. (pyrgophysa) forskali*. The lack of a second Pathologist at the laboratory has prevented the extension of this investigation to the field, and as certain aspects of the subject are too technical to be entrusted to the district sanitary staff, it appears as though the prosecution of this research will be indefinitely postponed.

CESTODE INFECTIONS.

65. Cestode infection of beef is a rarity in the Colony. Nevertheless, specimens of *T. saginata* have been received at the laboratory, while the pork tapeworm *T. solium* has also appeared.

OTHER INFECTIOUS DISEASES

ENTERIC OR TYPHOID FEVER.

66. In the absence of adequate and early notification the Sanitary Branch of the Department can do little to prevent enteric fever from spreading from the patient to other members of the household. Owing to the same cause and to the long incubation period of the disease the detection of the source of the infection is a practical impossibility. It is seldom that the patient can give any help, and the possibility of carrier infection further complicates the inquiry.

67. In those cases of which the Sanitary Department are notified disinfectants are supplied and those in attendance on the patient are taught their use. Even such simple measures as are taught are not always understood or practised and it will be a long time yet before the general population will be relieved of the liability of outbreaks to typhoid and other infectious intestinal disease.

A case of *B. paratyphosum C.* infection was diagnosed by the serum reaction.

GENERAL MEASURES OF SANITATION

NIGHT SOIL AND CONSERVANCY.

68. The night soil services in Port Louis continue to be carried out by the staff of the Medical Officer of Health, Port Louis. The steady progress made in the extension of the sewerage system is causing a reduction in the number of pail services which have to be maintained.

69. The inhabitants of Port Louis have a long way to go before they will be in a position to reap the benefits of the water-carriage system which is being installed. The necessity of flushing the closet pan immediately after use is by no means generally recognised, and on many premises the presence of a water closet has done little to solve the problem of the immediate removal of excrement from the premises owing to the failure of the occupants to use the apparatus properly. Blockages of the drains are a common cause of nuisance, owing to the practice of using excessive quantities of paper; failure to actuate the flush on use; or of throwing into the pan objects likely to obstruct the drains.

70. In Curepipe also, the Department conduct a pail night soil service. Many of the better class premises in Curepipe now have a septic tank and absorption pit system of water-carriage. Most new buildings which are being put up are designed for a water-carriage system. In a number of cases difficulty has been experienced in finding a suitable site for the absorption pits, because of the nearness of the ground water to the surface of the soil. A multiplication of such installations is beginning to be undesirable and it appears that the time has come for the installation of a skeleton sewerage system in the main residential parts of the township.

71. In most rural areas pit latrines are prescribed and in some parts the leaching cesspit connected with a water closet has been approved as an improvement on the pit latrine. Where there are bucket services the double bucket system is the rule, and the contents of the pails are disposed of by trenching on trenching grounds approved by the Sanitary Authority.

COLLECTION AND DISPOSAL OF REFUSE.

72. The Medical and Health Department are still responsible for the town cleansing services in Port Louis. In the townships the Township Boards undertake this work.

WATER SUPPLIES.

73. Difficulty has again been experienced in improving the quality of the water of the Mare-aux-Vacoas. A chloronome has been installed and arrangements have been made for the æration of the water before filtration. It is doubtful if the latter measure can possibly be effective, because the filters are so near the lake from which the water is taken that the oxygen absorbed in the æration process does not have sufficient time to act on the organic matter which is in excessive quantity in the raw water. A more promising line of treatment is the removal of a dense belt of palms which practically surrounded the lake and was subject to flooding in times of heavy rain. Much of this clearance has been done and, in my opinion, it is the most effective single measure which has been taken for the improvement of this supply. The effects of the removal of this belt of vegetation will take time to appear; but the remedy should result in permanent, through perhaps not entire improvement in the quality of the water.

74. The growth of *Beggiatoa alba* in the collecting chambers of the filters has been more than usually troublesome. It is quite possible that a reduction in the organic content of the water may help in restricting the growth of this fungus.

The water has been examined fortnightly, chemically and bacteriologically, throughout the year.

75. The Port Louis supply has undergone no change during the year. The main supply from the Grand River North West continues to be satisfactory.

76. In other parts of the Colony the water supplies are obtained by impounding streams flowing from protected catchment areas, or from impounded springs. The water thus obtained is piped to distributing reservoirs, whence it is piped to the consumers. Supplies of this type are always vulnerable, but they are the best that can be provided for the present, and they are a great improvement on the open irrigation channels and shallow wells which they have been provided to replace.

No outbreaks of disease attributable to water-borne infection were recorded during the year.

LABOUR CONDITIONS.

77. It would be no exaggeration to state that servants living on estates are now better housed than estate labourers who elect to live in houses of their own.

One subject which will need consideration in the near future is the regulation of agglomerations of houses and their growth into villages. At present the powers of Building Authorities are limited in rural areas to individual houses. There is no provision for the planning in advance of an area likely to be settled. The result is that though a number of huts or houses may be erected, each sanitary enough in itself, the resulting area may rapidly degenerate into an insanitary area through the faulty location of cowsheds, latrines and kitchens in relation to neighbouring structures.

FOOD AND DRUGS IN RELATION TO HEALTH AND DISEASE

Food.

78. There are six public and six private abattoirs in the Colony. The public abattoirs administered by the Municipality of Port Louis, the Boards of Beau Bassin–Rose Hill and Curepipe are each controlled by a veterinary officer.

The other abattoirs are conducted under the supervision of the sanitary staff.

It may be said that on the whole, the foodstuffs marketed are wholesome and of good quality. The only condition found with any frequency in the meat trade is tuberculosis, and even it is comparatively rare. Cestode infestation is practically non-existent among cattle, and it is very rare in human beings.

The only exception to this general rule is milk which is seldom retailed in its natural state. In spite of the control which is exercised and the heavy penalties inflicted upon offenders sophistication is rife and appears to be ineradicable.

In Appendix XI is recorded the number of times action was taken in connection with the sale of food.

Drugs.

79. The existing pharmacy ordinance cannot remedy the abuses at present occurring in the pharmacy trade. So far none of the amendments which have been suggested has proved acceptable.

MEASURES TAKEN TO SPREAD THE KNOWLEDGE OF HYGIENE AND SANITATION

80. The Hookworm-control staff deliver talks on hookworm infection and its prevention on the occasions on which mass treatments are being given. The sanitary staff have also been instructed to lose no opportunity of giving advice on hygienic subjects in the course of their routine duties. It is hoped that by entrusting sanitary duties to the Government Medical Officers of the districts, opportunity will be provided for the effective dissemination of a knowledge of elementary hygienic practice in the Colony. It is also hoped that as the Department attains its proper complement it will be able to reinforce the hygienic instruction given in the schools.

Training of Sanitary Personnel.

81. Six young men underwent a course of practical and theoretical instruction in the duties of sanitary inspector during the year. At the end of the course they will be submitted to a qualifying examination, their success in which will make them eligible for appointment in the Sanitary Branch of the Department.

RECOMMENDATION FOR FUTURE WORK

82. The future work of the Department will be to consolidate and improve its internal organisation, to continue the trial of the Health Centre System in the district of Pamplemousses with the object of ascertaining whether this is really a suitable type of organisation for local adoption and to improve the standard of knowledge and practice in the junior technical personnel of the Department.

PORT HEALTH WORK AND ADMINISTRATION

83. The following table summarises the work done by the Port Sanitary Authority :

	Sailing Craft	*Steamers*
Vessels arriving	4	221
Crew examined	136	19,829
Passengers examined	52	3,448
Vessels given pratique on arrival	4	146
Vessels given pratique after disinfection of the dirty linen and effects of the passengers, crew, fumigation and disinfection of the fore-castle	—	10
Vessels given pratique after disinfection of dirty linen, etc. and claytonisation of cargo	—	65
Vessels arriving from infected ports	—	75
Vessels detained for purposes of disinfection and fumigation on account of plague, cholera and small pox ...	—	75

THE MATERNITY AND CHILD WELFARE MOVEMENT IN THE COLONY

84. The Maternity and Child Welfare movement may now be regarded as a permanent feature in the life of the Colony and it may not be inappropriate at this stage of its development to place on record a short account of the events which led to the establishment of the present organisations and the forms in which the earlier phases of the movement manifested themselves.

A good deal of time has been absorbed in the preparation of this short review. It has been necessary to resurrect numerous official files from what was doubtless hoped to be their last resting place in the Registry and the difficulties of obtaining a clear view of the development of this movement would have been even greater had it not been for the fortunate discovery of four admirable summaries prepared by Capt. B. A. Francis in July 1925. Nevertheless, the way in which development occurred has made it extremely difficult to describe it in a connected narrative. As development proceeds one finds that activity takes a number of directions and events move concurrently along these. To knit the whole into a short consecutive story is practically impossible; but it is hoped that this attempt will serve as an adequate record of what has been the first phase in the movement.

85. The official story begins in November 1913 when the then Governor, Sir John Chancellor called attention to the heavy infant mortality in Mauritius *especially in the Indian community*. The italics are mine and they have this significance that though the movement owed its inception to conditions especially present in the Indian community there is no record, nor is there any evidence that any effective participation in it by Indians took place.

The Governor instructed the Medical Director and the Protector of Immigrants to study the subject and to make suggestions for remedying the existing conditions.

The Medical Director suggested the introduction of three lady doctors. The Protector of Immigrants pointed out that Indian women strongly objected to being treated in childbirth by women not of their own race and recommended the introduction from India of midwives trained under Lady Dufferin's scheme. The Indian Government were requested by letter to state if they would be prepared to select and send to Mauritius a number of Governmnt dais or midwives. An answer was received to the effect that there were no "Government" midwives in India. Though midwives were trained under the Dufferin scheme, they were not subsequently employed by the Government but by the public. The outbreak of war put an end to developments in this direction.

THE DE CHAZAL FUND.

86. On November 13th 1916, during Sir Hesketh Bell's administration, Dr. E. L. de Chazal offered to hand over to the Government of Mauritius Rs. 100,000 to constitute a fund for the reduction of infant mortality. The offer was gratefully accepted.

Dr. de Chazal stated in his letter notifying the Government of his proposed gift that "the primary object of the fund is to provide maternity nurses to the poor women of the general population." In using the term general population he did not mean it to be interpreted in the sense in which it is used in official documents, where the term General Population includes all members of the community not of European or Indian race. He was fully aware of the need of the Indian population for a proper maternity service as will be seen later.

Time was occupied in making the arrangements for the handing over of the gift. The deed of gift stated that "the income to be derived from the fund" shall be devoted and applied solely to measures generally calculated to decrease infantile mortality in Mauritius; and in a letter to the Governor Dr. de Chazal stated that his idea was "to instruct midwives and nurses who will practice their profession among the poor and agricultural classes." The fund was to be administered by a Committee to be composed of the Governor, the Colonial Secretary, the Director of the Medical and Health Department and two unofficial persons selected and appointed by the Governor. Dr. de Chazal very liberally gave full latitude to the Executive as regards the disposal of the income, subject only to the proviso that no religious denominational influence should be permitted to affect the disposal of the Fund.

87. When the Fund began to yield income two schemes were put on foot:—(*a*) the training of sufficient midwives to meet the needs of the Colony; and (*b*) the establishment of a Crêche in Port Louis. What one might call the crêche movement suffered a number of vicissitudes and it eventually died in October 1925. It has not been resurrected to date. The idea of a crêche was never fully understood in all the unfortunate history of this movement. Sir Hesketh Bell's idea in founding the crêche was to provide a place where skilled care might be taken of infants whose mothers were at work or were too poor or too sick to nurse or to feed their babies properly. This was never realised. In November 1918, Sir Hesketh Bell wrote "most of the babies now in the crêche either lost their mothers at birth or have since become orphans. One is the child of a lunatic. Some are "enfants trouvés"." Lack of public interest and a very high mortality amongst the infants admitted to the crêche led to the abandonment of the idea. During this time a second crêche had been established at Malmaison by Dr. G. Léclezio. Again high infant mortality caused the abandonment of the experiment after a few months experience.

TRAINING OF MIDWIVES

88. On June 8th 1917, Sir Hesketh Bell held a meeting with Drs. E. L. de Chazal and F. A. Rouget, Medical Superintendent Civil Hospital, and discussed and adopted a provisional scheme for the training of midwives at the Civil Hospital. The training was entrusted to Dr. Sénèque, the Resident Medical Officer of the Civil Hospital.

As an inducement for suitable women to appear for training it was to be made known that " as soon as an adequate number of women have been trained as midwives (for work among the labouring classes) none but licensed persons will be permitted to work as midwives." The Governor expressed the hope that " the women who now make their living in that line will probably realize that unless they secure the necessary instruction they will, before long, lose their business." He underrated the power of passive resistance when it is supported by an influential body of public opinion, none the less powerful through not being voiced.

89. The scheme of training envisaged by Dr. Rouget contained the following features:—(*a*) the training should extend over a period of twelve months. The teaching was to be essentially practical and as much as possible conducted at the patient's bedside; (*b*) the students were to be remunerated at the rate of Rs. 12 per month. They were to be provided with uniform aprons, and also with a free meal, either breakfast or dinner, as well as tea,according to whether they were on night or day duty (in lieu of rations they might receive an inclusive pay of Rs. 25 a month: this was added later); (*c*) at the conclusion of their training they were to be examined " to ascertain that they have fully grasped what they have been taught and that they thoroughly realise the purport of their training." Successful candidates were to be given a certificate of competency to practice midwifery; subject to their submission, every two years, to an examination to show that they had not forgotten what they had been taught.

90. Difficulty was experienced in several directions. Conditions arising out of the state of war had militated against recruitment to the Government services. The Colony was beginning to experience the unheard-of material prosperity of which the war was the cause; and better remuneration for service of any kind was to be obtained outside the Government service than in it. Shortage of staff in the Civil Hospital combined with the inadequacy of the training given was one of the difficulties which was never successfully overcome. But what killed the scheme from the outset was the complete failure of the Indian community to avail itself of it.

Hitherto, the only women under training were those of the section of the population locally known as Creoles. In January 1918 it was decided to invite proprietors of sugar estates to select suitable Indian women from their estate populations to be trained as midwives. This was not done without certain misgivings having been expressed by Drs. Rouget and Paddle as to the relations which might develop between the Indian students and those of other race. Nevertheless the effort was made. This failure obliged the Government to modify its policy and in the words of Sir Hesketh Bell " to give a reasonable amount of instruction to women of a suitable class and to place them on estates as salaried and licensed midwives."

In July 1918 four pupils out of the six who had completed a year's course of training, qualified as midwives. Before the end of the year all four had found positions as midwives on estates. It was decided to pay them a fee from the de Chazal Fund of Rs. 20 per mensem for the first year of their work, the estate contributing another Rs. 40 per mensem. The midwives were further allowed private practice in neighbouring villages.

91. At a meeting of the Committee of the Fund in November 1921, it was decided that midwives should be established in the principal villages as the training of increasing numbers of midwives developed. The committee again made a fruitless attempt to obtain the attendance of Indian women for training. In 1922 the subject was again referred to and on this occasion the Government undertook to provide for the training of midwives an annual sum of Rs. 6,000 to supplement the de Chazal Fund, if adequate and suitable arrangements were being made for training and instruction. Again an effort to ensure Indian cooperation was a failure

In February 1923 a Despatch was received from the Secretary of State for the Colonies enclosing an extract from the Colonial Advisory Medical and Sanitary Committee which stated that " apart from the de Chazal Fund for the training of midwives no attention has been given to questions of maternity and child welfare." Sir Hesketh Bell, in reply, pointed out that a sum of Rs. 5,000 had been provided in the Estimates for 1923–24 for the training of midwives to supplement the de Chazal Fund.

During this year it was reported that the training being given at the Civil Hospital was very inadequate. No candidates passed their final examination. The responsible Medical Officer was censured by the Governor and his fees, which had been paid from the de Chazal Fund, were stopped. Other arrangements were made for training, and in order to facilitate the training of midwives Drs. Rouget and de Chazal collaborated in the authorship of a book which was produced by the Government Press and published under the title " Guide d'Hygiène Infantile " in 1924. This handbook is now in its fourth edition.

92. As a consequence of the passing of the Labour Ordinance in 1922 a number of the Estates which had been contributing to the maintenance of qualified midwives discontinued their contribution. In spite of the fact that those women had had sufficient time to became known to the women on the estates they were unable to earn their living. Later the same experience was the fate of a number of others who had been established in the townships of Curepipe, Quatre Bornes and Beau Bassin on the basis of a fee of Rs. 5 to be paid by the Poor Law Commissioner for every pauper woman treated by them. The reason given for this failure in every case was the competition experienced from the uncertified dais or sage-femmes.

In 1927 the subsidy from the de Chazal Fund for the remaining estate midwives was stopped. They disappeared.

The Child Welfare

93. The germ of the Child Welfare is to be found in the 8th interim Report of Dr. A. Balfour in which he refers to the work done in Durban and especially to a report furnished by Dr. McNeill, the officer in charge of child welfare in that city. In 1922, Dr. T. B. Gilchrist stated that he considered the question of child welfare in Mauritius to be so important that he had invited Dr. K. McNeill to visit Mauritius and give the Colony the benefit of her experience. He suggested that the de Chazal Committee " might meet and hear Dr. McNeill and, if necessary organise a Ladies' Committee to take an interest in such affairs."

This proposal was acted upon and, after hearing Dr. McNeill, the Committee recommended " as a first step that meetings of ladies might be organised in the districts to meet Dr. McNeill who kindly offered to supply any information and give details of the work being done elsewhere." A Committee of Ladies might then be formed in each district to secure the service of a suitable candidate for training as a District Visitor.

A meeting was held of 35 ladies under the chairmanship of Dr. de Chazal who explained the reasons for convening the meeting. Dr. McNeill was present and replied to certain questions. The meeting decided to form itself into a Child Welfare Society. Mrs. Grannum was elected President and Mrs. Gilchrist, Honorary Secretary. At subsequent meetings committees were formed in the Districts with the object of reporting the names of suitable and deserving persons who would be likely candidates for the position of district visitors or midwives, and generally to promote the objects for which the society had been formed. This society gradually became dormant through lack of proper technical guidance and financial support.

94. In the Estimates 1924–25 a sum of Rs. 5,000 was voted for the Maternity and Child Welfare Society which was to benefit from the provision as soon as its organisation should have been placed on a sound and adequate footing. Out of this appropriation funds were taken for the training in Africa of a Mauritian woman as a Health Visitor. A sum of about Rs. 1,600 was alloted for her passage and maintenance during the three months' course of training. The rest of the money lapsed on the Treasury.

This experiment was a failure.

95. The idea of a child welfare society lay dormant until 1925 when, as a result of a petition from a number of certified midwives stating that they were destitute through " the deceits of many women styling themselves midwives " and praying to be employed as salaried midwives of the Government, Sir Herbert Read, then Governor, appointed, under the presidency of Lady Read, a committee " to enquire into and report upon existing arrangements in regard to child welfare and its associated branches, *i.e.* training of midwives, crêches, etc. and to make recommendations, financial and other, for placing on a sound and adequate footing a society to be designated " Maternity and Child Welfare "." The present child welfare society owes its existence to the labours of this committee.

The committee reported in November 1925. The report covered a number of subjects, but it is only necessary here to mention the recommendations regarding the proposed child welfare society. The main points of the recommendations were as follows:—(*a*)that an annual grant of Rs. 5,000 be made by the Government to the proposed Maternity and Child Welfare Society; and (*b*) that the formation of such a society should be left to private enterprise. The committee expressed the opinion that it would be most effective if composed of ladies and independent of all Government control. The President, Lady Read, undertook to form such a society. She succeeded in doing this towards the end of the year.

96. The first maternity and child welfare centre was opened at Rose Hill on March 5th 1926. It was conducted by a staff consisting of an Honorary Physician, a Health Visitor (resident) and a certificated Midwife.

The scope of the work comprised:—

(*a*) district visiting;

(*b*) an ante-natal clinic;

(*c*) a post-natal clinic.

The funds of the society consisted of a Government grant of Rs. 10,000; supply from the Government Medical Stores of simple drugs, and subscriptions from the general public. From that date the history of the society is one of steady and continuous development and extension of its activities.

97. Dr. de Chazal had been employed in the Government Service as Medical Superintendent, Victoria Hospital, from July 1922 until December 1925. He then retired from the service to devote himself to private practice. This was an important event for the Maternity and Child Welfare Society, for it enabled Dr. de Chazal to participate in its work to a greater extent than he had been hitherto able to do and to learn from actual experience what was being done.

98. In 1927 he addressed the Government in a memorandum in which he made a number of criticisms of the objects on which the income of the de Chazal Fund was being spent, and he pointed out that the results obtained were not commensurate with the expenditure. He complained that the funds were used solely for the training of midwives who, on account of causes which have already been mentioned, were unable to earn a living in their chosen profession. He then raised the question as to whether the fund should be used for the training of midwives at all, now that the conditions ruling when the fund was established were no longer operative. He ended by expressing the opinion that " a private fund like the de Chazal Fund would be more profitably employed in furthering measures which are somewhat beyond the scope of Government ", and among the examples of such measures he included " subsidising schemes for child welfare centres conjointly with schemes inaugurated with public charity."

In consequence of this memorandum a meeting was called of the Committee of the Fund. This meeting decided to cease making any further contribution for the training of midwives; to discontinue existing subsidies to midwives (vide ante); to contribute to the Maternity and Child Welfare Society an annual sum of Rs. 4,800, on condition that the society made arrangements to give Government-trained pupil midwives outdoor experience, and to make a contribution to the Medical Director for the purchase of models and other apparatus for the training of midwives.

From this date the Maternity and Child Welfare Society has been the sole channel through which the de Chazal bequest has been applied.

99. At the present day the Child Welfare Society derives its revenues practically entirely from the de Chazal Fund supplemented by generous contributions from the Central Government either in the form of direct monetary grants, or of grants through the Poor Law Department for the relief of pauperism; by grants from the township Boards and by the free grant of simple medicines and apparatus from the Medical and Health Department. Contributions from the public represent only an infinitesimal part of its revenue.

The society operates at the present time in the Districts of Plaines Wilhems, Grand Port and Flacq. In Plaines Wilhems it maintains three main centres, at Rose Hill, Vacoas and Curepipe; and two subsidiary centres, one at Quatre Bornes and one at Henrietta. In Grand Port there is a centre at Rose Belle and in Flacq a centre at Central Flacq. Four honorary physicians are employed together with one female superintendent and 17 midwives.

GOUTTE DE LAIT.

100. The Société Médicale de l'Île Maurice decided to participate in the celebration of the anniversary of the birth of Louis Pasteur on the 27th December 1922. Public subscription was opened, and after certain tributes had been made to the memory of this illustrious scientist, there was left a

balance of about Rs. 11,000 which it was proposed to hand over to the Government on certain conditions for the formation in Port Louis of an institution to be known as the Goutte de Lait, Pasteur.

The Société Médicale, in making this offer to the Government, further added that " it would be pleased to give you all the necessary information regarding the creation and the working of the said institution and all the help necessary for the working of it."

After three applications for the necessary information had been unanswered by the Société, the matter was dropped by the Government.

Later, on the arrival of Lady Read, two members of the Société Médicale, Drs. Rouget and Célestin interviewed her on the subject. Apparently no Government action followed this interview.

101. In 1926 the Mayor of Port Louis, Mr. R. Maigrot, and the Municipal Council decided to effect the establishment of the Oeuvre Pasteur by offering it premises in Port Louis, together with a monthly subscription. This offer was accepted by the Société.

102. The Society, wisely, decided to work along well proved lines, and established in Port Louis a Goutte de Lait upon the model described by Dr. Léon Dufour in his well known little book entitled " Comment on crée une goutte de lait." A clinic was opened in April 1927, which reproduced faithfully the organisation described by Dr. Dufour.

The aims of the Oeuvre may be briefly summarised as follows:—

(*a*) The supply to infants of milk properly sterilised and " humanised " according to the requirements of the infant;

(*b*) the conduct of an ante-natal clinic;

(*c*) the conduct of a clinic for infants.

103. As has been the case with the Child Welfare Society, the Oeuvre has been enabled to make steady progress by the financial assistance afforded to it by the Government of Mauritius and the Municipality of Port Louis. Dr. F. A. Rouget, *O.B.E.*, who has been associated with the Oeuvre since its establishment has published a number of interesting reports on its work, each of which records greater scope and activity than its predecessor, and under his skilful guidance the value of the Oeuvre to the town of Port Louis has been securely established beyond all doubt.

THE EFFECT ON THESE INSTITUTIONS ON GOVERNMENT POLICY.

104. At the present day the two societies dealing with the welfare of mothers and infants are in receipt of little financial support from the general public. The bulk of their revenue is derived from the Government. Without the support of the Central Government, the Municipality and the District Boards, they could effect little; with this support they are able to accomplish much. Their autonomous constitution endows them with a flexibility and a freedom of action which government departments necessarily lack. They can fulfil a most useful part in the campaign for the protection of maternal and infant life and health, and it would be most inadvisable not to make the fullest use of the services they best can render in the general campaign against ill-health.

105. It appears to me that the Government can safely entrust child welfare to these bodies, reinforcing them where necessary, by the provision of additional funds. If this is done, the work of the hospitals and dispensaries in the Colony may be restricted to the care and treatment of the sick and

to the conduct of confinements in which conditions arise necessitating the admission of the mother to hospital. It would be redundant to establish as an integral part of the Medical and Health Department provision for ante-natal clinics and similar preventive measures, when there are already at hand instruments better adapted for this purpose. By such a division of functions as has been suggested above the resources of the Government and the Societies can best be applied along lines in which each can exert its greatest beneficial effect.

THE MIDWIVES ORDINANCE.

106. In order to implement the promise given to candidates for midwifery studentships that as soon as an adequate number of women would be trained at midwives none but licensed persons would be permitted to work. Ordinance No. 26 of 1926 was enacted. This ordinance had been preceded by the enactment of the Notification of Births Ordinance (14/1925) in the previous year. The Notification of Births Ordinance was intended to provide the Medical and Health Department with early information regarding the occurrence of births, so that Departmental officers could get into touch with the mother and render her such assistance as circumstances might permit. Notification of a birth is to be made to the nearest police station within 36 hours and the person notifying the birth is required to state:—(*a*) the date, time and place of the birth; (*b*) whether the child was born alive and was alive at the time of notification; and (*c*) the name and address of the informant.

Armed with this weapon, the Government was ready to proceed with the Bill designed " to secure the training of midwives in the Colony and to regulate their practice.'' It is interesting to note here that the proposed Bill repealed the Proclamation of the 10th May, 1817 which was the only enactment dealing with the regulation of midwives at the date of the submission of the Bill to the Legislature. In due course the Bill became law and was enacted as Ordinance 26 of 1926.

107. As the instrument of the law the Ordinance provides a Midwives' Board consisting of the Director of the Health Department, Chairman; two Government Medical Officers and two duly qualified medical practitioners, to be appointed annually by the Governor. The Board is empowered to authorise the registration of Midwives and Labour Attendants, to arrange for the training of Midwives and their examination and to issue to successful candidates certificates of competency to practise. Disciplinary power in the form of removal from the register either temporarily of permanently of a registered person is also given to the Board, subject to the right of appeal by the person concerned to the Supreme Court. Penal clauses ensure that the provisions of the Ordinance would be respected.

The Ordinance could not be enforced at once because at the time of its enactment there were not enough midwives on the Register for the needs of the Colony. As the two child welfare organisations began to make their presence felt, however, and as the number of trained midwives on the register increased, the Ordinance was applied first in Port Louis and later in the District of Plaines Wilhems. In 1933 it was made aplicable to the whole Colony.

108. The Ordinance, to date, has been a complete failure, so far as concerns the amelioration of the conditions of women of the agricultural classes. The failure has been due to a number of causes; but the chief appears to be economic, and it operates in this way. The untrained Indian

midwife, known as the dai, takes entire charge of the parturient woman from the beginning of labour until such time as she is ceremonially clean and fit once more to take her place in society. She undertakes work such as the washing of the soiled bedding and clothing of the mother which a government trained midwife will not do. She helps with the housework, so far as the mother's apartments are concerned. Amongst the poor her fee is a rupee or two; her meals; and perhaps the gift of some articles of clothing. She, herself, may be an agricultural labourer, not exclusively depending on her art as midwife for a living. She is of the same race as the patient and her ways are the ways of her employers. By contrast, the government trained midwife is not of the same race as the patient, she does not work in the fields, her standards of living are entirely different; her whole outlook is strange and she will not perform the menial tasks carried out by the dai. Moreover, she must charge more, and the provision of her fee is far too heavy a burden for the precarious household budget to face. She is therefore left without employment; the ordinance is evaded and the dais continue to flourish.

109. It is clear that there is no hope for a satisfactory solution to this problem until there are forthcoming from the Indian section of the population a sufficient number of candidates for training as midwives, who will be prepared to give the same kind of service as that at present given by the dai, except that in the conduct of the confinement they will use proper methods and will attend to the minutiæ of technique which ensure the safety of the mother and infant. Nothing would be gained by a rigorous enforcement of the law in the absence of an adequate number of midwives of Indian race. It is therefore for the Indian community to avail themselves of the help proffered by the Government in the amelioration of conditions fraught with danger to Indian mothers and infants.

110. Summary of the work performed by the qualified midwives employed by the Government in the District in 1935:—

	No. of visits made.	No. of confinements conducted.
Grand Port	1,750	175
Curepipe	172	52
Flacq	452	200
Rivière du Rempart	316	201
Savanne	515	81
Long Mountain	321	40
Bon Air	539	154

THE MIDWIVES BOARD

111. The Board held one sitting during the year.

The composition of the Board was as follows:—

The Director, Medical and Health Department.—*Chairman.*
The Medical Superintendent, Civil Hospital.
The Medical Superintendent, Victoria Hospital.
Dr. A. de Chazal, F.R.C.S., M.R.C.P.
Dr. A. Delaitre.

Four applications for registration as Midwives were considered. The Board, being satisfied that the applicants were of good character and otherwise eligible, ordered that their names be entered in the Register of Midwives.

The Police have prosecuted 27 women for illegal practice of midwifery and the total amount of fines inflicted by District Magistrates upon non-registered Labour attendants was Rs. 190.25, excluding the costs of the cases.

THE LEPROSY BOARD

112. The Leprosy Board consists of :—

The Director, Medical and Health Department.—*Chairman.*
The Medical Superintendent, Leper Hospital.
The District Magistrate, Port Louis.

The Board sat twice during the year: on the 9th January and 17 June, as the result of which two patients were recommended for admission and detention in the Leper Hospital.

HOSPITALS

113. There has been an increase in the number of patients treated in the hospitals of the Colony: 27,908 against 26,541 for the previous year. The number of confinements conducted in hospitals was 1,100 as compared with 1,033 for 1934.

The number of estate hospitals at the end of the year was 38.

HOSPITAL ADMINISTRATION

114. In order to compare the expenditure of the hospitals with one another a return is required from each showing the daily expenditure incurred per patient under a number if items of the Estimates. The items were: "Travelling, transport expenses and subsistence allowances" " Services rendered by the Railways", " Provisions, fuel and lighting", "Drugs and Instruments", " Implements, stores and disinfectants ", " Clothing, bedding, uniforms and washing ", and " Extra Assistance, Medical and other." These items include the greater part of the provision made on behalf of the hospitals. They do not include, however, the personal emoluments of the permanent staff. The following figures show the daily average expenditure per patient for 1935:—

Hospital	Average cost per patient daily. Cents
Group A—Flacq	58
Mahebourg	60
Souillac	72
Long Mountain	67
Poudre d'Or	59
Group B—Victoria	76
Civil	84
Moka	83
Group C—Leper	57
Mental	35

The hospitals have been grouped according to the work required of them. The establishments of Group A take medical and simple surgical cases, surgical operative work is restricted as much as possible, patients requiring operative treatment being drafted to the hospitals of Group B. The Group B are general hospitals with a preponderance of surgical wards. Victoria and Moka have wards for the reception of first class paying patients whose dietary and equipment are more expensive than those of the third class and pauper patients, so that the daily average cost per patient is a good deal higher than it is in hospitals of Group A. The C Group comprises the residential institutions. The figures in this group are scarcely comparable because the Mental Hospital patient-days amount to over 63,000, whereas those of the Leper Hospital number only 4,000.

115. The professional work of the hospital is summarised in the table on page 33. In the rural districts the principal causes of admission to hospital are malaria, ankylostomiasis and respiratory disease. It will be noted from these returns that pneumonia and ankylostomiasis are noteworthy causes of death in hospital.

The reason, as regards the high mortality rate due to ankylostomiasis, is that a certain proportion of cases shew a high degree of severity characterised by a grave anæmia and extreme debility. Whether these features appear suddenly or whether they are of slow development is difficult to say. It is, however, the fact that when cases of this kind are admitted to hospitals they are generally so ill that their recovery is hopeless.

The small number of patients remaining in hospital at the end of the year is owing to the fact that most people in the Colony like to be at home during the New Year, and hospital patients who might otherwise be detained for some days longer frequently apply for their discharge from hospital at this time.

116. The nursing establishment of the hospitals is still very much below a reasonable minimum. 8 additional warders and 12 additional nurses were provided in the Estimates 1934–35 which were voted by the Council of Government in July, 1934. Unfortunately, it has not been possible to fill all these posts as yet. It is hoped that by the end of next financial year the vacancies will be filled by the engagement of suitable candidates. This will relieve the strain to some extent, but the establishment will remain insufficient to provide for leave of absence or for any sudden influx of patients beyond the usual numbers.

REPORT ON HOSPITALS FOR THE YEAR 1935.

HOSPITALS.	Patients remaining 31/12/34	New Admissions	Deaths	Patients remaining on 31/12/35	No. of beds	No. of Surgical operations	Particular diseases causing largest number of admissions.	Particular diseases causing largest number of deaths.
Civil	214	7,923	487	156	300	3,268	Malaria, Bronchitis, Pneumonia, Venereal Diseases, Ankylostomiasis and Nephritis.	**Pneumonia, Nephritis, Enteritis and Pulmonary Tuberculosis.**
Port Louis Prison ...	1	259	4	2	16	17	Malaria, influenza and Diseases of the digestive System.	**Bronchitis.**
Long Mountain ...	21	2,011	109	24	60	154	Malaria and Ankylostomiasis.	**Malaria and Pneumonia.**
Poudre d'Or ...	10	1,899	35	15	70	126	Ankylostomiasis, Cellulitis and Influenza.	**Bronchitis, Pneumonia and malaria.**
Flacq	20	2,256	124	4	86	342	Malaria, Dysentery and Influenza.	**Malaria, Pneumonia and Dysentery.**
Mahebourg ...	56	3,260	188	53	108	818	Ankylostomiasis and Malaria.	**Ankylostomiasis and Pneumonia.**
Souillac	28	2,072	73	28	103	475	Ankylostomiasis.	**Ankylostomiasis.**
Victoria ...	109	5,445	305	118	254	1,603	Ankylostomiasis, Abscess, Malaria and Dysentery.	**Pneumonia, Ankylostomiasis and Dysentery.**
Beau Bassin Prison ...	3	293	8	14	32	31	Influenza, Malaria, Abscess and Dysentery.	**Enteritis.**
Moka	13	1,716	80	28	83	457	Malaria and Ankylostomiasis.	**Dysentery.**
Mental (Infirmary for physical diseases) ...	7	187	44	9	64	215	Malaria, Epilepsy and Dysentery.	**Phthisis, Cerebral Hæmorrhage and Epilepsy.**
Barkly Industrial School	—	105	—	—	—	3	......	......
Total ...	482	27,426	1,457	451	1,176	7,509		

DISPENSARY RETURNS

117. The dispensaries and the hospital out-patient departments were consulted by male patients 138,520 times, and by female patients 132,206 times; total 270,726.

The number of new cases during the year amounted to 190,460. In 1934, 173,926 cases were recorded.

Consequent on the opening of Bon Air Dispensary in Pamplemousses in February, the travelling dispensary system in the district was discontinued.

PRISON HYGIENE

118. Prison hygiene has been maintained at its usual high standard. There has been no serious outbreak of communicable disease at either prison and the quarantine system in force has kept the Central Prison, in which the long sentence prisoners are confined, fairly free from the commoner infections.

The principal affections met with in the criminal classes are scabies, which is extremely common throughout the Colony, and venereal disease.

METEOROLOGY

119. The Director of the Observatory has kindly furnished the following table.

METEOROLOGICAL RETURN FOR THE YEAR 1935.

FROM THE RECORDS OF THE ROYAL ALFRED OBSERVATORY 178 FT. ABOVE SEA LEVEL.

Month 1935.	Mean of Grass Minimum °C	Mean Maximum °C	Mean Minimum °C	Mean Range °C	Mean °C	Mean Relative Humidity %	Rainfall ins.	Mean Wind velocity m.p.s
January ...	20.6	30.1	22.6	7.5	26.1	76.3	11.28	2.97
February	22.3	29.3	23.5	5.8	26.0	84.1	12.79	3.19
March ...	21.2	28.9	22.6	6.3	25.3	81.5	3.62	2.71
April ...	20.4	27.7	22.0	5.7	24.4	84.9	16.10	2.80
May ...	16.8	26.1	19.1	7.0	22.2	75.7	1.41	3.16
June ...	17.0	24.3	18.9	5.4	21.2	78.5	4.80	3.80
July ...	14.4	23.0	16.6	6.4	19.5	76.7	2.27	3.90
August ...	14.5	24.4	16.5	7.9	20.1	76.5	1.32	3.02
September	15.4	24.7	17.8	6.7	20.9	73.6	1.44	3.82
October ...	15.6	26.7	18.4	8.3	22.2	71.8	1.26	3.32
November	19.1	27.7	20.8	6.9	23.8	79.1	5.77	2.90
December	19.9	30.8	23.0	7.8	25.6	72.6	3.82	2.82
Year ...	18.1	27.0	20.2	6.8	23.1	77.6	65.88	3.20

Maximum Shade Temperature = 33.2°C on January 3rd.
Minimum ,, ,, = 12..7°C on July 7th.
Maximum hourly wind velocity = 13.4 m.p.s. on February 28th.
Maximum gust velocity = 21..0 m.p.s. on February 28th.
Maximum Rainfall in 24 hours = 119.8 mms. ending 5h on April 16th.

GENERAL

River Reserves Board.

120. Four meetings were held and eighteen applications were examined during 1935.

The Inspector General of Police was appointed in 1934 a member of the Board.

The permanent appointment of an officer for the effective control of the River Reserves was also considered.

Rodrigues.

121. I was able to spend some 16 days in Rodrigues in September.

During my visit a number of outstanding questions relating to the action to be taken with regard to suspected or infected ships from the Far East were settled. Questions of water supply were discussed with His Excellency the Governor, and inspections were made of the principal water supplies in the Dependency. Suggestions were made for the improvement of the supply for Port Mathurin: the principal village in the Island.

122. The report of the Government Medical Officer, Rodrigues, printed as Appendix XII to this report records the main features of medical and sanitary interest.

123. Rodrigues is one of the few places in the tropical belt where malaria is not endemic. The reason for this is that there are no mosquitoes of the genus *Anopheles* established there. Persons infected with malaria have landed in the Dependency from time to time, but owing to the absence of a mosquito vector other persons have not been infected, with the exception of one case thought to be due to direct transmission through the bite of some bloodsucking arthropod, whether bug or mosquito was not established.

The absence of anophelines is amply compensated by the numbers and ubiquity of mosquitoes of other genera. *Culex fatigans* and *Stegomyia fasciata* are common; yet there is apparently no filariasis though the infection is common enough in Mauritius.

The large disproportion between the birth and death rates of the population shew that it is in process of vigorous growth. This, in itself, will inevitably bring serious problems in its train. The growth of the population in numbers is far outstepping its growth in productivity and sanitary practice, and it would appear that this community is fast heading for the kind of trouble experienced in a congested community whose hygienic practice and general economic level is low. Hookworm infection is already present and is bound to increase unless the people can be induced to build sanitary latrines and to use them habitually.

The prospect of establishing such habits in this population are not very encouraging at present.

124. It is my pleasant duty to thank all members of the Department for their willing co-operation in the work recorded here.

15th May, 1936.

J. BALFOUR KIRK,
Director, Medical and Health Department.

Annual Report of the Bacteriological Laboratory for the Year 1935.

STAFF

Senior Pathologist and Superintendent : A. R. D. ADAMS, M.D., D.T.M.
Pathologist : Vacant
Government Analyst : J. A. R. STOYLE, B. Sc., A.I.C.
Acting Assistant Bacteriologist : LOUIS MASSON.
Laboratory Assistant (Pathology): LEWIS WEBB.
Laboratory Assistant (Chemistry): R. AVICE DU BUISSON.
Clerical Assistant : F. LEGRIGORE.

ADMINISTRATION AND CHANGES IN STAFF

There were no changes in the staff of the laboratory during the year.

Dr. Adams proceeded on European leave on December 9th 1935.

Some further modifications in bench accommodation, and in the lighting arrangements in the main laboratory were effected. Bench lighting for microscopical work has been installed, and plugs have been put in which enable current to be obtained in rooms which are more convenient for the erection of dark-ground apparatus and similar devices. Repairs have been effected to some of the out buildings which had fallen into bad condition, and arrangements are at present being made for major alterations and substantial improvements to the very excellent stable accommodation available at the rear of the laboratory. The grounds of the laboratory have been rendered less desolate by the planting of some trees kindly supplied by the Agricultural Department; and the interiors of the buildings have been lightened by an application of paint to the walls.

The work of the laboratory has proceeded steadily and without interruption throughout the year. The settlement of the staff in their new titular posts has greatly helped in the smooth working of the institution; and it is to be hoped that the vacant post of Pathologist may soon be filled to enable the maximum of work to be performed with efficiency. The interruption in continuity of the investigations undertaken by the laboratory, more especially into trypanosomiasis of stock, due to the departure of the Pathologist on European leave is very greatly to be deplored. Work on such subjects involves prolonged study of individual animals for periods extending over years; the preliminaries may take several months as suitable material has to be acquired, strains have to be developed, and " clean " animals examined regularly for weeks before experiments can be commenced. It is unprofitable to embark on such studies without the assurance that reasonable continuity of effort for suitable periods may be expected; this observation is valid for all biological work involving original investigation.

Certain modifications in technique have been incorporated into the routine work of the laboratory. The most notable of these has been the adoption of the " canned media " principle for bacteriological work. This method was originated by McCartney (1933) and consists of the use of screw-capped bottles in the preparation, storage and employment of culture media. It appeared that this technique had very much to recommend it in tropical countries, where extremes of temperature and humidity are the rule. In the case of this laboratory culture media have always been made in small quantities and at short intervals of time as drying or contamination by fungoid growths have occurred when they have been kept more than a very few weeks. The adoption of the McCartney technique has enabled us to make our media in greater bulk at suitable intervals throughout the year, and storage difficulties have entirely been eliminated. The media themselves have also proved infinitely more suitable for use when employed in the small vials recommended, and the differences between samples of the same batch of Lœffler, or Agar slopes, kept in the usual wool-stoppered tubes and in the screw-topped glass vials after even short intervals of time are remarkable. The storage of the sugars, their sterilisation by use of Seitz filters, and the addition of these carbohydrates to the stock medium immediately before use, has been found to obviate certain fallacies in the reactions previously found to occur with these media. Our experience, however, has not been as happy as that recorded by McCartney in the use of the larger bottles. Bottles of capacity of 8 ozs. and over we have found to yield a high initial breakage-rate during sterilisation in the autoclave; and the employment of these larger vessels resulted in an increased expenditure on glass-ware. This has been obviated by the employment of bottles with stoneware tops, rubber washers and wire snap fittings for sterilising and storing media in quantities over ten ounces. For water examinations we have found it preferable to retain the older technique using wool plugs.

The majority of the time available outside routine work was devoted to an investigation into problems associated with trypanosomiasis of stock in the island. In collaboration with the Agricultural Department a laborious investigation was made into the incidence and distribution of trypanosomes of cattle. Several thousand of these beasts were examined, and three trypanosomes were found to exist in the indigenous cattle, *T. evansi, T. vivax* and *T. theileri*. The last of these three has not before been recorded in Mauritius; but there is no reason to suppose that it is not as common in this island as it has been found to be elsewhere throughout the world. The progress of this work is recorded in more detail in the section "Research." A small interdepartmental committee, of which the Pathologist was a member, was appointed to inquire into the situation, and a report was submitted to Government on its findings, together with certain recommendations for the conduct of researches to be carried out in the near future. As a result it is hoped that provision will be made shortly for proper laboratory investigation of the position of these trypanosomes in the local stock.

In addition to studies on trypanosomiasis of stock the investigation of the molluscan host of the endemic Bilharzia parasite was brought to a successful conclusion by experimental confirmation of *Bulinus* (*Pyrgophysa*) *forskali* as the local vector. This snail has been found in every stream in which it has been sought. It is generally distributed throughout the colony in running water, and it is of very material interst and public importance to note that it has been found clinging to water-cress and other edible water-plants purchased at local market stalls. Bilharzial infection may readily be acquired by the oral route, the infective cercariæ penetrating the mucous membranes of the upper part of the alimentary tract, and it is quite possible therefore that eating such material may give rise to infection where no exposure to the more normal route of infection can be traced.

We are particularly grateful to Mr. Pierre Hugnin for the generous gift of four sheep for experimental work on *T. vivax*. To a number of workers in European laboratories and institutions we are greatly indebted for kindness in the matter of identification of material, and enlightenment on details of technique in the execution of sundry examinations and analyses.

LABORATORY RECEIPTS IN THE FORM OF FEES

The following are the actual amounts collected during the year 1935, the total is slightly less than that of last year (Rs. 5,459.88).

Fees received at the laboratory	Rs. 1,927.50
Fees collected after reference to Treasury Department for action	969.79
From sale of Human B. C. G. Vaccine to the Government of Réunion	1,072.59
From sale of Bovine B. C. G. Vaccine by the Department of Agriculture	1,271.00
Total receipts ...	5,240.88

ROUTINE EXAMINATIONS

A total of 9,269 specimens was received at the laboratory during the year for the usual laboratory diagnoses and investigations as compared with 9,633 for the preceding year.

These routine examinations are recorded under the following sub-headings:—

I. PATHOLOGICAL SECTION.
II. BACTERIOLOGICAL SECTION.
III. MEDICO-LEGAL SECTION.
IV. MISCELLANEOUS SECTION.
V. RESEARCH SECTION.

The chemical, bio-chemical and toxicological analyses will be found in the appended Government Analyst's report. (Appendix I. *a*).

I.—Pathological Section

A.—Simple routine clinical examinations were made of the following 5,319 samples of material.

(*a*) BLOOD. (MICROSCOPICAL).

Full counts of red and white cells and haemoglobin determinations	16
Differential leucocyte counts	44
Films for malaria parasites	—
Plasmodium vivax	4
Plasmodium malariae	1
Plasmodium falciparum	8
Plasmodium tenue	1
No parasites found	67
Films for microfilariae.	
Wuchereria bancrofti	10
No microfilariæ	33
Compatibility for transmission	2
Cattle bloods for trypanosomes at the request of the Department of Agriculture	3,415
Total ...	3,601

(*b*) FAECES. (MICROSCOPICAL).

Total number examined	866
Helminths :	
Trichuris ova	546
Ascaris ova	208
" Hookworm " ova	295
Strongyle larvæ	44
Heterodera radicicola ova	11
Enerobius vermicularis ova	1
Clonorchis sinensis ova	1
Protozoa :	
Entamoeba histolytica	47
E. coli	54
Vegetative entamœbæ	11
Endolimax nana	16
Iodamœba butschlii	1
Giardia intestinalis	14
Trichomonas hominis	17
Blastocystis hominis	68
Balantidium coli	3
No helminth or protozoal parasites	124

(*c*) URINE (MICROSCOPICAL).

Total number examined	334
Hyaline casts	14
Granular casts	25
Cellular casts	7
Waxy casts	1
Schistosma hæmatobuim ova	13

(*d*) SPUTUM. (MICROSCOPICAL).

Total number examined	391
Mycobact. tuberculosis	79
Pneumococci	6
Streptococci	2
Staphylococci	2

(*e*) CEREBRO-SPINAL FLUID.

Total number examined	26
Leucocyte counts	22
Differential leucocyte counts	22
Nonne Apelt globulin tests	19
Estimation of albumen	3

(*f*) THROAT AND NASAL SWABBINGS. (MICROSCOPICAL).

Total number examined	40
Corynebact. diphteriae	4
Vincent's fusiform organisms	3
Hoffman's bacilli	2
Streptococci	2
Staphylococci	1

(*g*) PUS, DISCHARGES, SCRAPINGS, ETC. (MICROSCOPICAL).

Total number examined	61
Neisseria gonorrhoeae	9
Treponema pallidum	1
Streptococci	8
Staphylococci	6
Ascaris ova	1

B.—Morbid and histological examinations were made on 72 specimens of material. The following are the findings in some of these specimens, the remainder being normal tissues.

(*a*) NEOPLASTIC TUMOURS.

Carcinomata.

Cervix uteri	3
Scalp (squamous celled)	1
Neck (basal celled)	1
Breast (scirrhus)	2
Breast (medullary)	3
Ephitheliomata of skin, vagina, and cervix uteri	10
Columnar-celled of rectum	2

Sarcomata.

Round-celled of omentum	1
Osteo-sarcoma of tibia	1

(*b*) BENIGN TUMOURS.

Acute inflammatory conditions of vermiform appendices, lymph glands, cervix uteri and endometrium	6
Adenofibromata of breast	1
Adenomata of skin, and breast	3
Bilharzial infestation of vermiform appendices	3
Chronic cervicitis	1
Chronic endometritis	1
Chronic inflammatory condition of conjunctiva	1
Chronic metritis	2
Chronic salpingitis	2
Fibrolipoma of lip	1
Fibromata of foot	1
Fibromyomata of uterus, bladder, and of large bowel	3
Fibrous epulis of gum, and jaw	3
Malarial spleen	1
Filarial adenitis	1
Myelomata of tibia and of humerus	2
Papilloma of rectum	2
Pig's liver—advanced perilobular cirrhosis	1
Tubal abortion	1
Tuberculous lymphatic glands	2
Tuberculous kidney	1
Surgical kidney	1

C.—Serological tests for complement deviation, specific agglutination, and specific tests for syphilis and other diseases were performed on 3,078 samples of material.

(*a*) BLOOD SERUM.

Kahn Test.

Negative	1,920
Doubtful reactions	87
+	123
+ +	349
+ + +	258
+ + + +	23
Unsuitable for test	39
	2,799

Agglutination tests. (to significant titre).

Agglutinated by *Bact. typhosum* " H " serum	52
Agglutinated by *Bact. typhosum* " O " serum	27
Agglutinated by *Bact. paratyphosum* A " H " serum	1
No agglutination with *Bact. typhosum* " H " serum	197
No agglutination with *Bact. tvphosum* " O " serum	222
No agglutination with *Bact. paratyphosum* A, B, and C " H " serum	4
No agglutination with *Bact. paratyphosum* B " O " serum (*Bact. aertryke*)	1
No agglutination with *Bact. enteriditis* (Gaërtner) " H " serum	1
Total number of sera submitted for specific agglutination tests	254

(*b*) CEREBRO-SPINAL FLUID.

Kahn test.

Negative	17
Doubtful reactions	2
+	4
+ +	2
Total	25

II.—Bacteriological Section

A.—Cultural examinations were made on the following 468 samples of material.

(*a*) BLOOD.

Total number cultured	37
Bacterium typhosum	2
Bact. coli commune	2
Pseudomonas pyocyanea	1
Pneumococci	1
Staphylococci	4

(*b*) FAECES.

Total number cultured	16

(*c*) URINE.

Total number cultured	149
Bact. coli commune	12
Bact. coli communior	30
Pseudomonas pyocyanea	4
Bact. acidi lactici	4
Bact morgani	1
Bact. paracolon (Day)	1

(*d*) SPUTUM.

Total number cultured	6

(*e*) CEREBRO-SPINAL FLUID.

Total number cultured	5
Pneumococci	1

(*f*) THROAT AND NASAL SWABBINGS.

Total number cultured	142
Corynebacterium diptheriae	4

(*g*) PUS, DISCHARGES, AND SCRAPINGS.

Total number cultured	112
Neisseria gonorrhoeae	1
Corynebacterium xerosis	14
Pneumococci	1
Streptococci	20
Staphylococci	54

(*h*) MILK (COW'S).

Total number cultured	1

B.—Autogenous vaccines were prepared from the following organisms isolated, among others, from various samples, 70 in all.

(*a*) URINE.

Bact. coli communior	11
Bact. coli commune	5
Pseudomonas pyocyanea	1
Bact. acidi lactici	1
Other organisms	12

(*b*) SPUTUM.

Sundry	5

(*c*) PUS, DISCHARGES AND SCRAPINGS.

Neisseria gonorrhoeae	1
Pneumococci	1
Streptococci	2
Staphylococci	25
Other organisms	6

C.—Stock vaccines. The following were prepared:

T.A.B. Vaccine for prophylaxis	2,100 cc.
B.C.G. Vaccine (Human)	2,037 doses
B.C.G. Vaccine (Bovine)	1,956 doses
Besredka's antivirus from staphylococci	9,500 cc.
Besredka's antivirus from streptococci	4,000 cc.

D.—Water analyses and examinations of 312 samples.

Monthly examinations were made of the waters from the Marc-aux-Vacoas supply. The findings were strictly comparable to those of recent years, during which the quality of the water physically was found greatly to improve during the colder months of the year, and to degenerate during the hotter months. While the bacteriological findings give no cause for alarm, in so far as sewage contamination is concerned, the filters again have been shown inadequate to cope with their work. The most obvious fault in the system lies in the physical quality of the water, both before and after treatment, and is due to a factor that has caused trouble in many parts of the world. The shallow lake collecting system, and storage reservoir, promotes the growth of algae, and the high average temperatures further increase the growth of these organisms. Their removal is the major problem in effectively treating the water. This year definite steps have been taken to ameliorate the condition of the raw water, and already considerable clearing of the banks of the lake up to and above the high-water level has been done. Adequate measures have also been taken thoroughly to aerate the raw water before its passage through the filter beds. It is yet early to assess the results of these measures, but they would appear to be elementary steps in the right direction and fundamentally sound. At the present moment the installation of Paterson's Chloronomes is in progress, the object being to chlorinate the waters after filtration. To the writer it would appear that the amount of chlorine that will have to be added will be enormous, in view of the very high organic content of the treated waters; and that to treat the water efficiently nothing short of super-chlorination and the subsequent removal of the excess chlorine will be really satisfactory. It would appear that some physico-chemical precipitation treatment prior to filtration would result in considerable economy and greatly improved efficiency.

Weekly examinations of the Pailles supply have been continued, and the results have been uniformly good, with the exception of a single occasion when it was found, as a result of investigation following an unsatisfactory bacteriological report, that no chlorine was being added owing to a fault in the machine.

A number of analyses of private supplies have been made, and observations confirming previous remarks as to the unsuitability of the majority of these supplies were again found to apply.

E.—Milk examinations.

Quarterly examinations were made of milks from the Government Dairy as in previous years. It was again clearly evident that the quality of this milk is infinitely superior to that of certain fluids sold in the island under the name of milk. The bacteriological findings in certain samples of " milk " retailed locally were astounding, and the chemical and physical compositions of these fluids almost precluded the application of this designation.

III.—Medico-Legal Section

No specimens or exhibits inclusible under this heading have been received this year.

IV.—Miscellaneous

1. *Spirillum minus.*—By courtesy of Dr. Cantin of the Civil Hospital a case of Ratbite fever was examined early in the year. The patient, an Indian girl of 12 years, came into hospital with a history of having been bitten on the point of the chin three weeks previously by a wild rat. She presented most of the classical signs and symptoms of the disease,

and during one of the periodic exacerbations of fever 20 cc. of blood were taken from a vein and divided, intraperitoneally, among three guinea-pigs. One of these animals showed characteristic *Spirillum minus* infection after a lapse of two weeks ; the other two failed to become infected. Dr. Cantin shortly afterwards removed a number of slightly enlarged lymph glands from the posterior triangle of the neck ; these were ground in a mortar with sand, and the gland juice was distributed among another three guinea-pigs in a similar manner. All three animals became infected with *S. minus*. Repeated search of the patient's peripheral blood, about this time, failed to show the parasite in the circulating blood. Treatment with N.A.B. brought the condition in the patient to a rapid close.

The strain obtained from the four guinea-pigs has been maintained in this species of animals to the present date. All experimentally infected animals have died ultimately of the infection, usually after a period of three or four months.

2. *T. boylei.*—This trypanosome was described by Lafont (1912), a former director of this laboratory. He found it in reduviid bugs while he was investigating the parasite *Phytomonas davidi* also discovered by him. *Triatoma rubrofasciata* is fairly common in this island, but difficult to obtain except at certain periods when it is obtainable in large numbers. By the kind offices of Mr. Haddon of the veterinary division we were able to procure some few dozen of the bugs. On examination *T. boylei* was found in the majority of them, and an endeavour is being made to maintain the arthropods with a view eventually to working on the parasite.

3. *Balantidium coli.*—Another case of Balantidial infection of man was found at the Mental Hospital. The patient, again a Mahommedan, was reported by Dr. Dyson to have had attacks of diarrhoea, but there was no history of true dysenteric attacks. The parasites were present in the stools in enormous numbers, and the patient is reported to have had as little contact with pigs as his religious tenets dictated.

4. *Onthophagus bifasciatus.*—A further case of apparently true intestinal scarabiasis was found by Dr. Bouloux at Long Mountain. Several of these beetles were recovered from the freshly-passed stools of an Indian child.

5. *Chrysomyia bezziana.*—Dr. Madge, at Victoria Hospital, very kindly collected maggots from wounds on patients admitted to his care. These were preserved and forwarded to Professor Patton of the Liverpool School of Tropical Medicine, who reported that there were among them the larvae of the above insect, which apparently has not been recorded in this island before. Dr. Madge is now making a collection of material from cases of human myiasis with the object of determining the other species of myiasis-producing Diptera in the Colony.

6. *Bertiella studeri.*—This interesting parasite was originally found in man in this island. Two further specimens of the parasite have been found this year in the Mauritian group of colonies. The first was in an Indian boy of 7 years sent here by Dr. Pilot of Moka. The child was examined at the laboratory, and was found to be in excellent condition. No symptoms or physical signs attributable to his infestation could be discovered; his blood picture was normal; he had no oedematous areas; and was, in fact, an unusually healthy specimen of Indian childhood. He had always lived at Mount Ory, where wild monkeys (*M. cynomolgus*) are fouod in large numbers, but his mother indignantly denied that he had ever any association with monkeys, wild or tamed. After a period of observation of some weeks,

during which segments were passed roughly every four days, the child was given 1.4 cc. Carbon tetrachloride in ½ oz. Castor oil. One and a half hours afterwards a first motion was passed, in which was found the worm complete except for the head. This latter was never recovered in this stool or subsequent specimens.

The second case of *Bertiella* infestation was found in Rodrigues by Dr. Letellier, who kindly forwarded the material to the laboratory. The patient, a European girl of 5 years, had gone from Mauritius, of which she was a native, to Rodrigues eight months before the infestation was accidentally discovered. There is some history of short acquaintance with a tame monkey before leaving this island.

These two cases bring the total recorded to ten, of which five have been found in Mauritius. These last two cases are of particular interest in that the patients have been under observation some months before treatment; in neither has there been any obvious disability resulting from the parasitisations.

7. *Taeniasis.*—As is usually the case in the East taeniasis is of infrequent occurrence in Mauritius. This year however a number of cases have come to light, and six specimens of *T. saginata* and one of *T. solium* have been received at the laboratory.

8. *Davainea madagascariensis.*—A representative of this species of Cestode was recovered from a European boy aged 5 years. The specimen was recovered by Dr. Clifford Mayer, who kindly presented it to the laboratory. The infestation gave rise to a number of symptoms and clinical signs in the child, who very rapidly improved in health after successful treatment.

9. *General.*—Sundry pathological exhibits of interest were received during the course of the year. Among these may be mentioned an interesting myeloma of the humerus presented by Dr. Madge; filarial lymphoid hyperplasia of the labia majora from the same donor; a remarkably good specimen of double hydronephrosis, with accompanying hypertrophy and dilation of the bladder and ureters, obtained at a post-mortem at Victoria Hospital; Bilharzial infestation of the vermiform appendices and of the internal female genital appendages accounted for several fine specimens from sundry sources. Mount Ory, where wild monkeys (*M. cynomolgus*) are found in large num-

A few post-mortem examinations were made at the Victoria Hospital during the year. Among these death was determined to result from bilateral lobar pneumonia, acute peritonitis, intestinal perforation, and carcinoma of the female pelvic viscera.

Sundry objects suspected to be helminths of various kinds were submitted to the laboratory for examination. The majority of these proved to be vegetable matters passed through the intestine.

V.—Research

(*a*) *Bilharzia.*

Animal infection experiments were continued with the aim of proving the cycle of *Schistosoma haematobium* through *Bulinus* (*Pyrgophysa*) *forskali*. into experimental animals and back again into the mollusc. Some abortive attempts to infect small animals were recorded in the last annual report, but very shortly after that was written successful infestation of a mouse was obtained. From this animal some 200 odd adult male and female schistosomes were recovered. Mature viable ova, true to type, were found in the surrounding tissues; from these eggs were obtained living viable miraciada which freely penetrated clean snails; and from the latter were recovered the characteristic sporocysts and cercariae. It is interesting to note that the majority of the adult worms in the mouse were recovered from the pulmonary area, the liver was next in point of numbers, while the mesenteric vessels contained comparatively few worms. The males were present in the ratio approximately of twelve to each female; and almost every one of the latter sex was found *in copula*. On examination these helminths conformed in every gross morphological detail to typical *S. hæmatobium*.

The explanation of the previous lack of success in these experiments proved to be that offered in the last annual report, namely underinfestation. The mouse which gave the desired result was exposed to the attack of all the cercariæ emerging from two dozen infective snails over a period of twenty-four hours. Many hundred infective cercariæ must therefore have penetrated it, and the two hundred worms recovered at post-mortem probably represented but a fraction of the larvæ which entered its body.

Examination of numbers of actual specimens of the molluscan vectors of *S. haematobium* usually referred to in text books shows that *B. forskali* is a comparatively small snail. It seems justifiable to assume that the larger a snail, up to a point, the greater the number of sporocysts and cercariae it can produce. Therefore the small size of *B. forskali* permits it to produce a relatively small number of cercariae, a handicap which, in the writer's opinion, is offset by the large congregations of this snail which are found locally in places suited to it as a habitat. Assuming that man requires fairly massive invasion by cercariae to produce effective parasitisation, as is the case with small animals, this massive attack would be facilitated by the infestation of numerous snails collected together in a small area and the consequent emergence of a high concentration of cercariæ in the same limited area.

Attention to other work has rather precluded further pursuit of the local Bilharzia question at present. There still remain to be done a survey of streams and rivers, and a determination of the incidence and distribution of the disease in the island. The time occupied in travelling, and the distances to be traversed, at present prove insuperable obstacles to dealing with this aspect of the study, as the laboratory would necessarily be left unattended in the absence of a second pathologist to deal with routine and emergency work demanding his presence.

(*b*) TRYPANOSOMIASIS OF STOCK.

Record has already been made of the discovery of a number of cases of *T. vivax* infection in local cattle. Since that discovery considerable attention has been paid to the specific identification of all cases of trypanosomiasis in stock. A third trypanosome, *T. theileri*, has as a result been found in the cattle of this island. It has not been recorded here before; but it is world-wide in its distribution and, fortunately, is of little pathogenic significance under normal conditions. There can be little doubt that it is as prevalent in Mauritius as it is known to be in other parts of the world where it occurs; and that well over fifty per cent of the local cattle harbour it. No other trypanosome has been recovered during the many examinations made of local cattle, and a careful watch has been kept in particular for African pathogenic trypanosomes which might have been introduced equally as readily as was *T. vivax*.

The incidence and distribution of T. vivax and T. evansi in cattle.

From July 31st 1934 until May 1st 1935 arrangements made with the Department of Agriculture resulted in the submission of all slides from cattle found by them to be infected with any trypanosome to this laboratory. All the routine investigation was undertaken by the members of the veterinary staff, and only those films in which parasites had actually been found by them were sent here. During this period of nine months 5,471 cattle were examined, once each, by them, using the thin film method. Of these 5,471 cattle 65 were diagnosed by them as suffering from trypanosomiasis; and of the 65, forty (0.72%) were found by this laboratory to be suffering from *T. vivax* infestation, while twenty-five (0.46%) had *T. evansi.*

The above arrangement proving somewhat unsatisfactory to all parties for a variety of reasons, it was decided that for a period of a further three months (May 1st—July 31st 1935) all sides, irrespective of previous examination by the veterinary authorities, should be examined at this laboratory; while the veterinary staff were freed of this work and enabled to devote greater time to the field work and the collection of material. In this three months, 2,170 cattle were examined and forty-four (2.03%) were found infected with *T. vivax,* while sixteen (0.74%) carried *T. evansi.* (*See* Table I).

It is most important to emphasise that these figures are based on a single examination of a stained thin-film blood-preparation from each animal. The fact that *T. vivax* may retire from the blood of infected beasts for days, weeks, and in some cases several months, makes it obvious that the figure of incidence for at least this parasite is very considerably below the true figure. In the writer's opinion the true figure is probably at least four or five times that given above, and it may very well be considerably higher. The figure quoted for the incidence of *T. evansi* is probably much nearer the true figure, as *T. evansi* in infected animals is probably always present in the peripheral blood stream even though occasionally in very small numbers.

The distribution of each parasite was found to be general throughout the island, after account had been taken of a number of factors. In Black River District and the adjoining portions of Savanne, where cane is not grown to anything like the extent that it is cultivated in other parts of the island, draft cattle are present in considerably less numbers than in the more fertile districts. As is to be expected, both trypanosomes are considerably less prominent in these areas than elsewhere. It would appear from a study of the available records that the " rouliers " are largely responsible for the dissemination of these parasites throughout the districts in which they travel, and the peregrinations of the draft animals belonging to these men are eminently suited to the broadcasting of any virus which may attack cattle.

The routine examination of stock in the island by the veterinary section of the Department of Agriculture has been confined to cattle, for practical purposes. A few equines on occasions have been examined where there has been reason to suspect that all was not well with them, but no systematic studies on these beasts have been made. During the year three ponies, or horses, and a mule have been found infected with *T. evansi;* none have been found infected with *T. vivax*. Researches at this laboratory have shown that sheep and goats are peculiarly susceptible to the local *T. vivax*; in the ensuing section of this report some facts bearing on this will be recorded. Goats and sheep, like equines, have not been the subject of systematic study in the field however.

TABLE I.

To show the number of cattle examined, and the incidence of the two pathogenic trypanosomes of stock found in them during the periods July 31st 1934—May 1st 1935, and May 1st—July 31st 1935.

Period	Total number of cattle examined	Number infected with *T. vivax*	Number infected with *T. evansi*
July 31st 1924 to May 1st 1935 ...	5,471	40 (0.72%)	25 (0.46%)
May 1st 1935 to July 31st 1935 ...	2,170	44 (2.03%)	16 (0.74%)

The course of untreated T. vivax infections in various forms of local stock.

Numerous animals have been experimentally infected with local strains of *T. vivax* which have been isolated and maintained at the laboratory. Dogs, monkeys, rabbits, rats, mice, guinea-pigs, and domestic pigs have proved refractory to artificial infection with large doses of viable inoculum. These same animals have been found highly susceptible to infestation with local strains of *T. evansi,* and the issue in every case has been a fatal one in the case of the small mammals.

Cattle, sheep and goats have readily been infected and the course of the untreated infections has been observed in these creatures. Of six cattle experimentally inoculated with strains of *T. vivax,* and kept under the best conditions of housing and feeding at this laboratory, none died of the infections; but all six appeared, after some months, to develop considerable resistance to the parasites and ultimately showed the presence, in a high degree, of "premunisation." Four sheep perished directly as a result of *T. vivax* infestation; and of seven goats, six undoubtedly died of the infection. Four domestic pigs inoculated with massive doses of infective inoculum entirely failed to show any parasitisation. No equines could be procured for experimental work, and so no data have been obtained as to the course of the local disease in solipeds; this is an unfortunate, but under the circumstances unavoidable, omission.

In dealing with the course of infections in animals the methods employed for the diagnosis of parasitisation are of prime importance. It has already been frequently stated that *T. vivax* may be present in the peripheral blood for short periods, and may disappear therefrom for prolonged periods, only to recur again for further short periods and again disappear. Examination of the peripheral blood for trypanosomes, therefore, is an unreliable method of determining the presence or absence of this infection and it has been suggested by several workers that gland puncture is very considerably more efficacious in its diagnosis (du Toit, 1929., Parkin, 1931., and Saceghem, 1931.). Experiments were conducted with a view to determining whether this was indeed the case; and infected cattle, sheep, and goats were subjected, in addition to daily peripheral blood examinations, to regular frequent puncture of the pre-scapular glands. These glands usually became markedly enlarged within a few days of experimental infection of the animals, and trypanosomes were recovered in the gland juices usually twenty-four or forty-eight hours before they appeared in the circulating blood. After extensive observations over prolonged periods, however, it has been found that in our hands gland-puncture does not on the whole give any more reliable information than does regular blood examination. When the peripheral blood contains parasites the gland-juices also contain parasites, frequently in less numbers than does the blood; but when the blood is negative the gland-juices rarely contain more than very scanty trypanosomes, and may equally be completely negative on ordinary microscopical examination. Gland-puncture in our hands has proved a useful adjuvant to blood examination, but possesses no marked superiority to regular blood examination in diagnosis; it most certainly can not be relied upon to a materially greater extent than blood examination; both methods are almost equally uncertain in the exclusion of a *T. vivax* infection in cattle, sheep or goats. As will be shown subsequently the determination of the absence of *T.vivax* would appear to be a most difficult matter employing either or both of these methods of diagnosis (see particularly Ox A. Table II). Cattle apparently completely self-cured of a *T. vivax* infection can be shown still to harbour the parasite when they fall the victims of circumstances lowering their resistance to general infection. In this category may probably be included ill-treatment, lack of proper fodder and water, overwork, exposure to inclement climatic conditions, and other of the commoner ills befalling, on occasions, the local bovine population.

While it is not proposed here to deal with the effect of treatment on *T. vivix*-infected stock a single example of a natural infection subjected to several courses of treatment came under our observation. This animal, a working bullock, was found by us to be suffering from a severe *T. vivax* infection; the beast was ill and in a failing state. It was placed in the stables and there underwent a course of arsenical treatment; parasites were seen within a few days of its completion; it subsequently was subjected to a full course of tartar emetic with a similar end-result; and then a full course of Antimosan therapy was administered with a like result. Parasites, once the animal was put at rest, disappeared from the peripheral blood for prolonged periods; but recurred from time to time in small numbers and for very short periods, and their presence sufficed to demonstrate the inefficacy of the treatments administered. Unless careful daily examinations of the peripheral blood had been made over prolonged periods of time there is little doubt that a " cure," in the sense ot tissue sterilisation, would have been pronounced as a result of the administration of any one of the numerous medicaments. The writer is of the opinion that the single factor which was responsible for the general improvement in health and condition of this animal was rest, in association with good feeding and sanitary maintenance. The beast, in relation to its natural infection, behaved in no wise differently from animals experimentally infected and deprived of all drug treatment; after initial fever lasting a week or two, accompanied by the presence of relatively large numbers of parasites in the peripheral blood and gland-juices, it gradually recovered. Parasites became progressively more difficult to find in the various tissues, and finally disappeared for prolonged intervals of time. The general condition of this ox, after the first month of infection, rapidly improved as it has been seen to do in the case of well-cared-for experimentally-infected untreated cattle.

The object of these investigations to date has been the examination of the course of untreated infections in representative local stock. Until this has been done, in the writer's view, it is futile to attempt to assess the result of various modes of treatment on the local *T. vivax*. Once the natural course of the diseases is known attempts to influence this course can be made, and the success or otherwise of these attempts may reasonably be gauged. A study of the available literature, and the results of the few rather uncontrolled experiments performed locally in the field, point to the fact that the treatment of *T. vivax* infections is an exceedingly unsatisfactory affair. Numerous claims have been made for the efficacy of sundry drugs in eradicating the infection, but it is apparent that in Africa this trypanosome is entirely overshadowed by the accompanying *T. congolese* almost invariably associated with it. The therapy efficacious in combating this latter infection would now appear to be a matter of some divergence of opinion, and it is probable that in the case of both trypanosomes " premunity " may be promoted with a certain facility, but that tissue sterilisation in a reasonable proportion of cases is by no means easy of attainment. One of the main difficulties in the establishment of claims to the efficacy of any treatment lies in the obstacle presented by certain and efficient diagnosis, particularly in the case of *T. vivax* where small laboratory animals can not be employed for diagnostic inoculation. It can not be too strongly emphasised in Mauritius that disappearance of parasites from peripheral blood, as judged by thin blood-film examintion, does not mean " cure "; and that improvement in the general physical condition of infected animals during and after treatment is equally misleading as a criterion of "cure" of a *T. vivax* infection. While the immediate condition of a beast may primarily be the affair of the owner, so long as the animal is not permitted at large, once the animal is allowed in contact with other animals its potentialities as a spreader of infection are considerable, and the matter becomes one of general interest.

CONCLUSION

The excellent atmosphere prevailing at the laboratory is entirely due to the enthusiasm and interest of the staff in the performance of their duties. I would like to express my indebtedness once again to the technical members of the personnel for their whole-hearted support throughout the course of the year.

2nd December, 1935.

A. R. D. ADAMS,
Senior Pathologist and Superintendent.

PUBLICATIONS

Adams, A. R. D. (1935) Studies on Bilharzia in Mauritius.
II.—The recovery of adult *Schistosoma haematobium* after development in *Bulinus (Pyrgophysa) forskali* Ann. Trop. Med. and Parasitol. XXIX. 255.

Adams,, A. R. D. (1935) Trypanosomiasis of stock in Mauritius.
I.—*Trypanosoma vivax,* a parasite of local stock.—Ibid. XXIX. i.

Adams, A. R. D. (1935) Ascariasis of the liver.
Trans. Royal Soc. Trop. Med. XXVIII. 419.

Adams, A. R. D. (1935) A fourth case of human infestation with *Bertiella studeri* (Cestoda) in Mauritius. Ibid XXIX 361.

Three further papers at present in the press.

TABLE II

To show the course of Untreated T. vivax infections Experimentally produced in various animals.

Animal	Date infected and strain.	Date trypanosomes first found.	Course of infection.*
Goat 1.	9/7/34 from naturally-infected ox (Highlands strain).	13/7/34 (blood).	Tryps present daily until 2/8/34; then irregularly until 22/10/34: negative until 8/2/35 when goat had bilateral stable. parotitis and tryps appeared again in blood: numerous on 11/2/35: swarming on 12/2/35 when goat died.
Goat 4	10/12/34 from naturally-infected ox (Mon Désert strain).	19/12/34 (blood).	Tryps present daily until 8/1/35: then irregularly until 5/3/35: negative until 25/6/35: when animal found dead in stable. Cause of death undetermined on post mortem.
Goat 5.	1/3/35 from ox D (Highlands strain).	6/3/35 (gland). 8/3/35 (blood).	Tryps present daily until 13/3/35: then both blood and glands negative for two days: present subsequently daily until 1/4/35 when the animal died with a swarming infection.
Goat 6.	16/4/35 from ox D (Highlands strain).	23/4/35 (gland). 24/4/35 (blood).	Tryps steadily increased in numbers until 29/4/35 when swarming and animal died.
Goat 7.	18/4/35 from ox D (Highlands strain).	22/4/35 (gland). 23/4/35 (blood).	Tryps increased in numbers until 15/5/35 when swarming and animal died.
Goat 8.	18/4/35 from ox D (Highlands strain).	23/4/35 (gland). 24/4/35 (blood).	Tryps increased in numbers until swarming on 4/5/35 when animal died.

* After the first four or five daily punctures it was thought inadvisable to examine the prescapular glands daily. They consequently were examined twice weekly; alternate sides being taken in rotation. The glands enlarged to the size of a tangerine in the first week, remained enlarged for a month or so, and then commenced to decrease in size rapidly even while trypanosomes were to be recovered from them and were present in the blood.

TABLE II.—(*Continued*).

TO SHOW THE COURSE OF UNTREATED T. VIVAX INFECTIONS EXPERIMENTALLY PRODUCED IN VARIOUS ANIMALS.

Animal	Date infected and strain.	Date trypanosomes first found.	Course of infection.*
Goat 9.	30/4/35 from ox E.	8/5/35 (blood). (Gland negative on this day).	Tryps increased in numbers until 13/5/35 when swarming and animal died.
Sheep 1.	18/4/35 from ox D (Highlands strain).	23/4/35 (gland). 23/4/35 (blood).	Tryps present daily until 26/4/35: then irregularly present in both blood and glands rarely in high concentrations, until 21/6/35 when animal died.
Sheep 2.	18/4/35 from ox D (Highlands strain).	23/4/35 (gland). 23/4/35 (blood).	Tryps present daily in varying numbers, rarely large, until 14/5/35 when animal died.
Sheep 3.	1/5/35 from ox E (Mon Désert strain).	7/5/35 (gland). 7/5/35 (blood).	Tryps present in increasing numbers until 13/5/35 when animal died.
Sheep 4.	1/5/35 from ox E (Mon Désert strain).	8/5/35 (gland). 8/5/35 (blood).	Tryps present in varying numbers in blood and glands, both at times negative, until 3/7/35 when animal died with positive blood and glands.

* After the first four or five daily punctures it was thought inadvisable to examine the prescapular glands daily. They consequently were examined twice weekly; alternate sides being taken in rotation. The glands enlarged to the size of a tangerine in the first week, remained enlarged for a month or so, and then commenced to decrease in size rapidly even while trypanosomes were to be recovered from them and were present in the blood.

TABLE II.—(*Continued*).

TO SHOW THE COURSE OF UNTREATED T. VIVAX INFECTIONS EXPERIMENTALLY PRODUCED IN VARIOUS ANIMALS.

Animal	Date infected and strain.	Date trypanosomes first found.	Course of infection.*
Ox E.	4/3/35 from goat 4. (Mon Désert strain)	8/3/35 (blood) 8/3/35 (gland)	Tryps present daily in blood and glands until 28/3/35 when blood negative and gland very scanty; blood and glands negative except on odd days until 2/5/35 when both numerous. Since then both completely negative to date.
Ox F.	18/5/35 from sheep 1. (Highlands strain)	23/5/35 (gland) 27/5/35 (blood)	Tryps in blood and gland daily until 14/6/35 when both negative; then present irregularly in both blood and gland until 29/7/35 since when none seen in either to present date.
Ox G.	18/5/35 from sheep 4. (Mon Désert stran)	25/5/35 (blood) 25/5/35 (gland)	Tryps present daily in blood and glands until 7/6/35; until 31/7/35 very irregularly seen in one or the other or both; since then none seen in either to present date 25/11/35.

* After the first four or five daily punctures it was thought inadvisable to examine the prescapular glands daily. They consequently were examined twice weekly; alternate sides being taken in rotation. The glands enlarged to the size of a tangerine in the first week, remained enlarged for a month or so, and then commenced to decrease in size rapidly even while trypanosomes were to be recovered from them and were present in the blood.

TABLE II.—(*Continued*).

TO SHOW THE COURSE OF UNTREATED T. VIVAX INFECTIONS EXPERIMENTALLY PRODUCED IN VARIOUS ANIMALS.

Animal	Date infected and strain.	Date trypanosomes first found.	Course of infection.*
Ox A.	17/10/34 from goat 1. (Highlands strain)	24/10/34 (blood)	Tryps present daily until 17/11/34; then irregularly until 22/12/34 when numerous; subsequently completed negative. On 9/5/35 five cc. blood of sheep heavily infected with same strain inoculated; on 30/5/35 reinoculation of similar amount blood of same sheep; blood remained negative. On 8/8/35 this ox fell and dislocated a hip; on 9/8/35 a few parasites in blood; on 10 and 11/8/35 parasites in increased numbers and then animal had to be destroyed.
Ox C.	11/1/35 from goat 4. (Mon Désert strain)	16/1/35 (blood) (glands negative on this date)	Tryps present daily until 8/2/35; then irregularly in diminishing numbers until 14/2/35; then negative. On 9/5/35 five cc. heavily-infected blood of sheep infected Highlands strain inoculated; on 30/5/35 five cc. blood same sheep inoculated. Blood and glands negative up to present time.
Ox D.	12/2/35 from goat 1. (Highlands strain)	18/2/35 (blood)	Tryps present daily until 6/3/35; negative till 10/3/35; then present irregularly until 2/5/35 when very numerous; remained negative until accidental death on 1/7/35.

* After the first four or five daily punctures it was thought inadvisable to examine the prescapular glands daily. They consequently were examined twice weekly; alternate sides being taken in rotation. The glands enlarged to the size of a tangerine in the first week, remained enlarged for a month or so, and then commenced to decrease in size rapidly even while trypanosomes were to be recovered from them and were present in the blood.

Annual Report of the Government Analyst for the Year 1935.

STAFF 1935.

Government Analyst : J. A. R. STOYLE, B.Sc., A.I.C.
Laboratory Assistant : R. AVICE DU BUISSON.

Towards the end of the year, a supply of electricity was laid on to the laboratory and an electric centrifuge installed which has already proved of very great assistance.

ROUTINE EXAMINATIONS

During the year, analyses were carried out on 1717 samples as compared with 1715 for the preceding year. The work done comprised routine services for the Medical and Health, Public Works, Police, and Customs Departments.

For purposes of comparison with previous annual reports, the examinations are recorded under the broad headings previously employed.

I.—Bio-chemical Section

Qualitative or quantitative analyses were made on the following 1,025 specimens as compared with 1,093 for the previous year.

(*a*) BLOOD.

Van den Bergh reaction	on	2 specimens.
Quantitative estimation of urea	on	488 specimens.
Quantitative estimation of glucose	on	59 specimens.
Quantitative estimation of chlorides	on	14 specimens.
Sugar tolerance test	on	1 specimen.
		564 specimens.

(*b*) URINE.

General qualitative clinical analyses	on	223 specimens.
Qualitative test for acetone	on	47 specimens.
Qualitative test for aceto-acetic acid	on	20 specimens.
Qualitative test for biliary pigments	on	2 specimens.
Qualitative test for creosote	on	1 specimen.
Qualitative test for phosphates	on	1 specimen.
Quantitative estimation of sugar	on	144 specimens.
,, ,, of albumen	on	11 specimens.
,, ,, of urea	on	5 specimens.
,, ,, of phosphates	on	1 specimen.
		455 specimens.

(*c*) FAECES.

Quantitative estimation of total fats, split and unsplit fats	on	1 specimen.
Qualitative test for occult blood	on	2 specimens.

(*d*) GASTRIC AND STOMACH CONTENTS.

Fractional test meal	on	3 specimens.

(*e*) CEREBRO-SPINAL FLUID.

Quantitative estimation of glucose	on	1 specimen.

2.—Medico-Legal Section

(*a*) PUBLIC HEALTH.

The following 557 samples were received for analysis under this heading as compared with 471 samples for the preceding year. This increase however is more than accounted for by the new work undertaken this year of routine examinations of locally manufactured rum for the Excise Department.

Fresh Milk	268 samples.
Water	157 samples.
Vegetable Ghee	1 sample.
Medicinal Tinctures, Prescriptions etc.	7 samples.
Rum, excise	120 samples.
Perfumed Spirits	2 samples.
Stout	2 samples.
	557 samples.

Milk.—Of the 268 samples examined, 19 were found to be skimmed as compared with 73 for last year, 12 were both skimmed and watered and 111 contained added water. Twenty-seven samples had been boiled and one sample contained cane sugar.

The large reduction in the number of cases of skimming of milk is due to the raising of legal limit for milk fat in fresh milk from 2.5 to 3.0 per cent. by volume at 20°C which came into force on August 4th 1934 under the Milk Trade Regulations, 1934. On the other hand the number of cases of adding water to fresh milk has considerably increased.

Water.—Weekly chemical examinations of the Port Louis water supply were carried out and the results were very satisfactory, all the samples examined being of uniformly good quality.

Monthly chemical analyses of samples of the Mare-aux-Vacoas supply were also carried out but here the results showed a large periodic variation in the quality of the mixed filtered waters and, particularly during the summer months, indicated a considerable degree of vegetable contamination.

A Paterson Chloronome has been installed to chlorinate this water supply and was put into operation in December. A number of analyses have also been carried out in connection with experiments investigating the best condition of working for the Paterson Chloronome recently installed for chlorinating the mixed filtered waters from Mare-aux-Vacoas and these experiments are still in progress. A few analyses were carried out on waters from other sources of supply and on three samples from Rodriguez.

Medicinal preparations.—All samples received were found to have been correctly dispensed.

Rum, excise.—Of the 120 samples examined only two were found to contain furfuraldehyde and only one exceeded the legal limit of 0.1 grm. of furfuraldehyde per hectolitre of absolute alcohol.

Perfumed Spirits.—Two locally manufactured samples were received from the Customs Department. It was found that these could be made sufficiently potable by a simple process of dilution and filtration through animal charcoal.

Stout.—Two samples of locally manufactured stout were found to contain no alcohol.

(b) FORENSIC.

One hundred and twenty two articles of evidence, drugs and other substances were referred for chemical examination by the Judicial Authorities at the request of the Police and Revenue Departments as compared with 146 for the preceding year.

The examinations were called for in connection with the following offences:

Illicit distillation ...	... 16	exhibits	in 14	cases
Possession of Illicit Rum	... 53	,,	in 52	,,
Possession of Gandia...	... 7	,,	in 5	,,
Possession of Dangerous Drugs	... 5	,,	in 1	,,
Possession of Raw Sugar	... 5	,,	in 5	,,
Poisoning ...	... 36	,,	in 7	,,
Total	... 122	exhibits	in 84	cases

Possession of Illicit Rum.—Of the 53 samples examined only 16 were fount to be illicit.

Poisoning.—Only one human death by poisoning occurred during the year and in this case strychine was isolated from the organs of the deceased. In two cases of dog poisoning strychnine was found to be the cause of death. An interesting case of poultry poisoning was received in which it was established that death was caused by common salt being mixed with their food.

Possession of Raw Sugar.—All the samples received were found to polarise below 99.2° and were reported as raw sugar.

3.—Miscellaneous Section

Textile fabrics	4 samples
Beer colouring matter	1 ,,
Medicated wine	1 ,,
Solder	2 ,,
Corroded electric cable	4 ,,
Beeswax	1 ,,

Medicated wine.—A sample received from the Customs Department was found not to be sufficiently medicated for classification under this heading.

Solder.—Two samples were received from the Prisons Department for analysis.

Corroded electric cable.—Some sections of corroded electric cables were received from the Military Authorities for investigation into the cause of the corrosion. It was established that the unusually corrosive nature of the substratum in which the cables were buried was responsible for the damage.

BeeswaR.—A sample of locally purchased beeswax was examined and found to consist of paraffin wax coloured with curry powder. It contained no beeswax.

15th January, 1936.

J. A. R. STOYLE,
Government Analyst.

PROFESSIONAL STAFF OF THE MEDICAL AND HEALTH DEPARTMENT

STAFF

The professional staff of the Department on the 31st December, 1935, was as follows:—

Director : J. BALFOUR KIRK, M.B., Ch.B., M.R.C.P., D.P.H., D.T.M.&H.
Deputy Director of Medical Services : L. A. C. D'ARIFAT, L.R.C.P., M.R.C.S.
Medical Officer of Health, Port Louis and Port Health Officer : L. J. M. RAYMOND PILOT, M.B.B.S., M.R.C.S. L.R.C.P., D.T.M. & H.
Pathologist : Dr. A. R. D. ADAMS, M.D.
Pathologist : (vacant)
Superintendent, Civil Hospital : Y. CANTIN, M.R.C.S., L.R.C.P., D.T.M.
Medical Officer, Civil Hospital : Vacant (Dr. S. PEERBAYE, M.D. (Montpellier) (acting).
Medical Officer, Civil Hospital : Vacant (Dr. L. H. MOTTET, M.R.C.S., L.R.C.P., D.T.M. & H.—acting).
Superintendent, Victoria Hospital : L. R. DU VERGE, *M.C.*, M.R.C.S., L.R.C.P.
Medical Officer, Victoria Hospital : E. H. MADGE, M.B., B.S., L.R.C.P., M.R.C.S.
Medical Officer, Victoria Hospital : Vacant. (Dr. M. A. H. M. ROUSSET, M.D. (Paris)—acting).
Sueprintendent, Mental Hospital : J. D. DYSON, M.B., B.S., D.P.M. M.R.C.S., L.R.C.P.
Medical Officer, Mental Hospital : J. F. E. BRUNEL, M.D. (Montpellier).
Medical Officer, Port Louis : L. N. R. COMTY, M.B., B.S., M.R.C.S.
Health Officer Plaines Wilhems and Black River : R. LAVOIPIERRE, M.D. (Paris), D.T.M. (Paris), L.R.C.P., L.R.C.S., L.R.F.P. & S. D.P.H.
Superintendent, Leper Hospital : J. H. ANDRE, *M.B.E.*, M.R.C.S., L.R.C.P.
Senior Medical Officer, Hookworm and Malaria : L. J. MC. GREGOR, M.B., B.S., M.R.C.S L.R.C.P., D.T.M. & H.
Medical Officer, Hookworm and Malaria : L. V. PIERRE GOUPILLE, M.D. (Paris).
Medical Officer,Hookworm and Malaria : (vacant)
Radiologist : W. R. DUPRE, L.R.C.P. & S., L.F.P. & S., D.M.R.E.
Assistant Radiologist : R. PIERRE, M.B., B.S., L.R.C.P., M.R.C.S., D.T.M. & H., D.P.H.
Government Analyst : J. A. R. STOYLE, B.Sc., A.I.C.
Police Medical Officer : L. J. MAINGARD, *M.B.E.*, L.M.S., S.A., (London) Medecin Colonial (Paris).

DISTRICT MEDICAL OFFICERS

(Government Medical Officers having charge of a district hospital and of all the dispensaries in their district, and also of the Sanitation of the district).

Pamplemousses : J. H. ANDRE, *M.B.E.*, M.R.C.S., L.R.C.P.
Rivière du Rempart : S. PIARROUX, L.R.C.P. & S., L.F.P. & S.
Flacq : R. LAVENTURE, M.D. (Montpellier).
Grand Port : F. A. BOULOUX, M.R.C.S., L.R.C.P.
Savanne : JEAN CANTIN, M.D. (Paris), D.T.M.
Médecin Colonial (Paris).

LEAVE, MUTATIONS, ETC., AMONG PROFESSIONAL STAFF

Dr. A. R. D. Adams, Senior Pathologist, left the Colony, on leave, on the 9th December, 1935.

Dr. L. R. du Vergé, *M.C.*, Medical Superintendent, Victoria Hospital, went on leave on the 4th April, 1935 and returned on the 25th November, 1935, resuming duty on the 28th November, 1935. During Dr. du Vergé's absence, his duties were performed by Dr. E. H. Madge.

Dr. H. André, *M.B.E.*, Government Medical Officer, Pamplemousses, and Medical Superintendent, Leper Hospital, returned from leave and resumed duty on the 6th August, 1935.

Dr. W. R. Dupré, Radiologist, returned from leave and resumed duty on the 9th December, 1935.

Dr. Jean Cantin, Government Medical Officer, Savanne, returned from leave and resumed duty on the 26th June, 1935.

Dr. V. P. Goupille, Medical Officer, Victoia Hospital, was appointed to one of the new posts of Medical Officers created for the Hookworm and Malaria Branch, on the 19th January, 1935. He was replaced, from the same date, by Dr. E. H. Madge who was acting as Government Medical Officer, Rodrigues.

Dr. F. X. Letellier who had been temporarily employed as Medical Officer, Civil Hospital, was posted to Rodrigues and assumed duty there on the 21st January, 1935.

Dr. H. Joomaye, Government Medical Officer, Grand Port, resigned his appointment on the 30th November,1935.

Dr. F. A. J. Bouloux, Medical Officer, Civil Hospital, was appointed as Government Medical Officer, Grand Port, on the 1st of December, 1935, in the room of Dr. Joomaye.

Dr. L. H. Mottet was temporarily employed to replace Dr. F. A. J. Bouloux as Medical Officer, Civil Hospital.

Miss E. C. Humphreys, Matron, Victoria Hospital, left the Colony on leave on the 24th March, 1935.

Miss E. Duhau, Matron, Civil Hospital, went on leave on the 3rd September, 1934, and returned to this Colony and resumed duty on the 6th August, 1935.

APPENDIX III

Annual Report on the Hookworm Branch for the Year 1935.

STAFF AND ADMINISTRATION

On the 1st of February 1935 Dr. P. V. Goupille was appointed for the Northern districts. His appointment necessitated the employment of three additional fieldmen and a redistribution of the subordinate staff. The field staff now consists of:

(*a*) one Medical Officer and six fieldmen for the Central and Southren districts;
(*b*) one Medical Officer and four fieldmen for the Northern districts.

ACTIVITIES

The creation of the new team for the Northern districts has allowed the extension of the anti-hookworm campaign to the whole of the island this year.

The methods of combating hookworm disease are:

1. *Education.*—This has been thoroughly carried out in the past in the Central and Southern districts chiefly by means of lectures in the vernacular. The educational campaign this year has been continued and extended to the Northern districts.

2. *Soil Sanitation.*—This is for the time being outside the province of this Branch and in the hands of the Health Officers of the various districts. All towns and villages are adequately provided with latrines; unfortunately the latrines are rarely used by the labouring classes, so that soil pollution is as rife as ever.

3. *Treatment.*—The results of the general soil pollution are, firstly, that the infection approaches universality in the barefooted agricultural labourers as revealed by previous surveys, and, secondly, that when a labourer is cured he is soon reinfected. Under these conditions preliminary examinations before treatment verges on the absurd and mass treatments are indicated. Mass treatments are meant to treat the greatest number of persons as often as possible, not in the utopian hope of eradicating the infection but with a view to keeping the individual labourers in fairly good health until they can be persuaded to give up soil pollution.

RESULTS OF EXAMINATION OF SPECIMENS

The low percentage of Hookworm infection shown in the annexed table is due to the fact that only members of the better classes of the population, who are least likely to be infected, submit specimens. The true percentage of infection in the labouring classes must still be between 70 per cent and 95 per cent in various districts.

NUMBER OF TREATMENTS OBTAINED

In the annexed statistical table it is shown that 115,554 treatments were given to 87,584 persons, that is roughly to 22 per cent of the population of the whole colony.

21st January, 1936.

LEWIS J. McGREGOR,
Medical Officer in charge Hookworm and Malaria Branch.

STATISTICAL REPORT FOR THE YEAR 1935

EXAMINATIONS AT CENTRAL DISPENSARY.

Preliminary.

Examined	3,470
Positive for Hookworm	1,066
Percentage of Infection	30.7
Other helminths:	
Ascaris	1,430
Trichocephalus	2,605
Oxyuris	74
Tænia	2

After treatment.

Examined	158
Negative for Hookworm	124
Percentage of Negative	78.4

Treatments.

	First	Second	Third	Fourth	Total
Central Dispensary	5,741	2,396	894	443	9,474
Plaines Wilhemes	17,442	3,457	659	103	21,661
Moka	8,087	1,503	273	5	9,868
Black River	752	230	66	—	1,048
Pamplemousses	7,444	2,225	786	198	10,653
Rivière du Rempart	10,801	2,681	424	71	13,977
Port Louis	3,255	365	—	—	3,620
Savanne	10,589	3,291	782	51	14,713
Flacq	15,622	4,265	831	2	20,720
Grand Port	7,851	1,827	141	1	9,820
Total	87,584	22,240	4,856	874	115,554

APPENDIX IV

Annual Report on the Malaria Branch for the Year 1935.

ADMINISTRATION AND STAFF

There has been no change in the staff. The campaign undertaken in Plaines Wilhems last year has been proceeded with, more attention being paid to small water nuisances on private premises than had been possible hitherto.

SURVEY OF PLAINES WILHEMS

(*a*) *Malaria survey*.

(i) Curepipe. There has been no evidence of locally contracted malaria in this town or its neighbourhood during the year.

(ii) Vacoas-Phœnix. There is evidence that cases of the disease are rare in the town, but common enough in the neighbouring villages. Indigenous cases at the local dispensary fell from 47 in March 1934 to 9 in March 1935 in spite of a normally warm rainy summer.

(iii) Lower Plaines Wilhems. Blood films were taken throughout the year at Victoria Hospital and the following results as regards indigenous cases were obtained.

Month	M.T.	B.T.	Q.	Total
January ...	10	11	8	29
February ...	13	12	1	26
March ...	11	8	2	21
April ...	14	18	6	38
May ...	24	32	0	56
June ...	11	14	4	29
July ...	13	14	6	33
August ...	4	18	0	22
September ...	5	9	4	18
October ...	5	9	6	20
November ...	4	21	7	32
December ...	9	18	6	33
Total ...	123	184	50	357

The percentage of the three kinds of malaria in this region was therefore:

Malignant Tertian ...	34.5%
Benign Tertian ...	51.5%
Quartan	14.0%

The incidence of the disease is minimal at the end of the cool season and rises during the warm rainy months to attain a maximal peak in May.

(*b*) *The Spleen rate.*—This was taken during anti-hookworm treatments in the course of the third or winter quarter, and again during the last quarter of the year. There was no great difference to be noted between these two quarters, as might be expected from the seasonal variation of the disease shown above. The average spleen rate for the whole district was 3.4%. It was found that the district could be divided into four regions:

(i) the Southern region, including the towns of Curepipe, Vacoas and Phœnix, from 1,200 to 1,900 feet above sea level, where the spleen rate is below 2%.

(ii) the region extending North from this, including the towns of Quatre Bornes, Rose Hill and Beau Bassin, from 600 to 1,100 feet above sea level, with a spleen rate between 2% and 5% (average 2.9%).

(iii) to the East, the Camp Fouquereaux region and

(iv) to the West, the Holyrood—La Caverne—Solferino région, both of which contain villages with spleen rates between 5% and 10%.

ANOPHELINE BREEDING PLACES.

(*a*) *Plaines Wilhems.*—*Anopheles costalis* larvæ have been found 13 times in this district, 11 times in artificial breeding places and twice in natural ones. *Anopheles funestus* larvæ have been found twice, on both occasions in artificial breeding places. These findings show the importance of the house to house search for water nuisances.

(*b*) *Moka.*—In Moka, where no house to house search was made, *Anopheles costalis* larvæ only were found on 11 occasions, 8 times in well known natural breeding places which it has not been possible to drain as yet and thrice in artificial waters. *Anopheles maculipalpis* was not found at all during the year.

ANTIMALARIAL MEASURES.

(i) *Oiling.*—Whenever larvæ of anopheline mosquitoes have been found, the breeding places have been kept as traps, oil being used to destroy successive broods for some months before destruction of the breeding place was carried out, when this was possible.

(ii) *Abatement of water nuisances in towns.*—Water nuisances are very numerous on private premises in towns in Plaines Wilhems in spite of a piped water supply. As it is known that *A. costalis* especially can adapt itself to these small artificial breeding places, it was considered important to wage a campaign against these. The number of such nuisances abated was:

Locality	Abated by Moustiquiers	Abated by Requests	Total
Curepipe	371	81	452
Vacoas--Phœnix ...	787	390	1,177
Quatre Bornes ...	1,058	159	1,217
Rose Hill-Beau Bassin ...	1,201	329	1,530
Total ...	3,417	959	4,376

(iii) *Use of Larvivorous Fish*.—" Millions "(*Labristes pœciloides*) were used to stock ponds used for watering in flower and vegetable gardens. Altogether 490 such ponds were stocked with this fish during the year.

(iv) *Major Works*.—The first Labour Gang has been engaged:

(*a*) in canalizing the following swampy heads of rivers beyond the Southern boundary of the town of Curepipe:

(i) River Seche, completed on 12.5.35,

(ii) River Eau Bleue (in part), completed on 8.11.35,

(iii) Rivulet Lamy, still proceeding.

(*b*) in sidewalling Mompoullan drain, a feeder of River du Mesnil—16.7.35 to 26.8.35.

(*b*) in regrading and retraining Rivulet Gros Cerf from La Brasserie Road to its junction with River Seche—8.11.35 to 24.12.35.

(*d*) in repairing damages caused by flood to the sidewalls and side-drains of River Tatamaka at Camp Caval—13.5.35 to 18.5.35.

The second Labour Gang has been engaged at River Plaines Wilhems, at Belle Rose, in straightening the edges of Bassin Loulou and canalising and sidewalling the two branches of the river from Bassin Loulou to their junction behind the old Fanucci factory.

21st January, 1936.

LEWIS J. McGREGOR,
Medical Officer in charge, Hookworm and Malaria Branch.

APPENDIX V

Annual Report of the Medical Officer of Health, Port Louis, for the Year 1935.

ADMINISTRATION

The Sanitary Staff was composed of three Inspectors and two Guards. The Inspector in charge of the section which includes the Docks and Wharves has the additional duty of supervising the sanitary measures imposed on the incoming ships.

PUBLIC HEALTH

No epidemics were recorded during the year under review.

VITAL STATISTICS

The area of Port Louis is about 16 square miles. The estimated population was 54,876 on the 1st January and 55,194 on the 31st of December. The estimated population on the same dates in 1934 was 54,459 and 54,876 respectively. The population on the 30th June 1935 was 54,937.

	1934	1935
BIRTHS		
Total	2,104	2,111
Birth-Rate per 1,000 of population	38.5	38.4
Still Births	169	184
DEATHS		
Intra-Urban	1,256	1,454
Extra-Urban	163	251
Total	1,419	1,705
Crude Death-Rate per 1,000 of population ...	25.9	31.0
INFANTILE MORTALITY		
Under one year	242	320
Between the age of one and five	90	136
Infantile mortality rate per 1,000	115.0	151.5

COMMUNICABLE DISEASES

MALARIA

The number of reported deaths from malaria and cachexia of malarial origin was 182 as against 97 in 1934 and 149 in 1933 ; an increase of 85 in 1934 and 33 in 1933.

The total number of patients treated at the Civil Hospital was 620 in 1935, 863 in 1934, 1,032 in 1933 and 1,156 in 1932.

The total number of deaths due to malaria occurring at the Civil Hospital was 35 in 1935, 18 in 1934, 40 in 1933 and 42 in 1932; with a case mortality of 5.6% in 1935, 2.1% in 1934, 3.8% in 1933 and 3.6% in 1932.

PLAGUE

No sign of plague, whether in man or rat has been detected since 1927.

FILARIASIS

Sixteen cases were diagnosed at the Civil Hospital, seven at the Eastern Dispensary and ten at the Central Dispensary.

INFECTIOUS DISEASES

DISEASES	CASES Crude	CASES corrected
Diphtheria	6	4
Enteric fever	8	6
Erysipelas	43	23
Puerperal Sepsis	24	4

HYGIENE AND SANITATION

PLAGUE

(*a*) *Rat-proof Granary :* Grain imported into the Colony is stored in the Granary which was designed to hold a maximum of 300,000 bags. In cases of emergency more grain can be stored temporarily on the top floor which can accommodate 120,000 bags.

Wholesale dealers are allowed to stock a maximum of 1,500 bags in their stores on condition that the latter be made rat-proof and maintained in rat-proof condition.

(*b*) *Rat-Surveillance :* Sanitary surveillance over the rodent population in the harbour area and the strip of town bordering on the harbour was pursued thoroughout the year.

The animals caught or found dead are examined microscopically.

Rats caught	5,180
Flea--rate per rat	2.65
Gravid females caught	171
Number of young recorded	730
Fecundity index	4.26

(*c*) *Port Sanitary Measures :* On the arrival of healthy ships from plague-infected ports, the luggage of passengers is disinfected at the Harbour Disinfecting Station and all cargo fumigated by means of the Clayton apparatus.

Passengers are put under surveillance.

MALARIA

In the *Intra-Urban Area,* the paved beds of the streams which flow from the surrounding hills to the sea have been completely repaired.

The banks composed of gravel and boulders which were being constantly scoured by the rushing waters during the rainy season with the formation of pools and consequent breeding of Anophelines, chiefly A. costalis and A. mauritianus were attended to during the year.

The work which was performed by the Public Works Department as part of the scheme to relieve unemployment in the Colony consisted in removal of the silt and boulders and their replacement by concrete and the contruction of retaining walls.

In the *Extra-Urban Area,* malaria is still rife. The chief sources of malaria are Lataniers' Stream on the Eastern side, Dayot Canal and St. Louis' Stream in the Western.

The only measures available for the present are palliative *e.g.* oiling pools, keeping the banks free from weeds and algæ and preventing stagnation of water.

The number of breeding places detected during the year in the intra and extra urban areas was as follows:

	Intra-Urban	Extra-Urban	Total
Anophelini :			
A. costalis	61	28	97
A. maculipalpis	1	2	3
A. funestus	—	—	—
A. mauritianus	3	—	3
Culini :			
Stegomyia	159	13	172
Culex	263	51	314
L. tigripes	—	—	—

GENERAL MEASURES OF SANITATION

NIGHT SOIL AND CONSERVANCY

Sewerage System : 158 more premises were connected with the sewerage system, this leading to the abolition of 218 pail services.

Pail Latrines : At the end of the year there were still 418 pail services in the intra-urban area, and 101 in the extra-urban area.

The night soil buckets are collected in special motor lorries supplied by a Contractor and the contents disposed of at the Cassis and Paul and Virginie Tipping Chambers which connect with the sewerage system.

Pit Latrines : In Cassis, Roche Bois and Sainte Croix, pit latrines are used for the disposal of excreta.

COLLECTION AND DISPOSAL OF REFUSE

This work performed by the Sanitary Department was quite satisfactory. The refuse is collected daily in motor lorries belonging to Government and is used for the filling of hollows at Roche Bois and Plaine Lauzun.

The Staff consists of one Dump Overseer, seven Sectional Overseers and 143 labourers.

WATER SUPPLY

There are four sources of water supply in Port Louis *i.e.*

1. Grand River North West:

(*a*) from " La Digue " Dam the water is conveyed by two water mains known as the Municipal (18 inch pipe) and Rectification (19 inch pipe) Canals to Pailles filter beds. The filtered water is then chlorinated by means of a Paterson's chloronome and stored in the Monneron and Signal Mountain reservoirs. The chlorinated water supply is limited to the intra-urban area and is also supplied to shipping.

(*b*) At the spot nearer to the sea than " La Digue " where Dayot canal starts. This supplies the Cassis District and ends at Redoute Street. The remaining portion up to Pouce Street is dry.

2. Calebasses River : Water impounded by a dam near Bois Marchand Cemetery is brought to the Abattoir, Sainte Croix, Terre Rouge and part of Roche Bois.

3. Lataniers Stream : The water is conveyed by pipe to Vallée des Prêtres from a dam near the river source.

4. Mare-aux-Vacoas : This water supply reaches Port Louis through an eight inch piping from a reservoir at Petite Rivière and renders available a distribution of approximately a million gallons daily in the town area. It is also supplied to shipping.

Grand River North West and Mare-aux-Vacoas are now constant water supplies throughout the day.

MARKETS

The three markets of the town are under the direct supervision of the Municipality. They have now fallen into a state of disrepair and are no longer fly-proof.

SLAUGHTER-HOUSE

The slaughter house at Roche Bois is managed by the Municipality, and all carcases are examined by a Veterinary Surgeon.

CEMETERIES

Two of the three cemeteries belong to the Municipal Corporation; a third, the Chinese Cemetery, is under the control of the Sanitary Department.

MILK SUPPLY

The control of milk was conducted by Sanitary Inspectors Louis and Tanguy working together.

The following is a summary of the action taken in this connection:

No. of milk sellers whose milk was tested by the Inspectors	332
,, ,, samples sent to the Government Analyst for examination	28
,, ,, samples found genuine	4
,, ,, ,, ,, sophisticated ...	24
,, ,, milk sellers cautioned	4
,, ,, contraventions established	24
,, ,, convictions	20
Imprisonment	2
Length of time (months)	2
Amount of fines	Rs. 995.

16th April, 1936.

L. M. J. R. PILOT,
M.B., B.S. (London) D.T.M. & H. (Lond.)
Medical Officer of Health, Port Louis and Port Health Officer.

APPENDIX VI

Report on the Mental Hospital for the Year 1935.

The total number of certified insane persons in the Colony on 31st December, 1935 was 927, compared with 926 on 31st December, 1934.

2. The following table shows the distribution of the 927 certified insane persons in the Colony on 31st December, 1935:

	GENERAL			INDIAN			CHINESE			TOTAL
	M.	F.	T.	M.	F.	T.	M.	F.	T.	
At Mental Hospital ...	195	193	388	186	126	312	15	3	18	718
On probation leave ...	39	42	81	74	35	109	—	1	1	191
On leave under G.N. 239/24 ...	4	4	8	6	4	10	—	—	—	18
Total ...	238	239	477	266	165	431	15	4	19	927

3. The percentage sex-distribution of the 927 certified insane persons was males 55.98 and females 44.01, compared with males 50.74 and females 49.26 for the estimated population of the Island on 31st December, 1935.

4. The following table gives the insane-rates per 10,000 of the population of the Island, calculated on the number of certified insane persons in the Colony on 31st December, 1935:

	M.	F.	T.
General population	41.2	37.5	39.3
Indian population	19·3	12.7	16.1
Chinese population	25.7	15.0	22.3
Total population	25.8	20.9	23.3

The above table shows that insanity is more prevalent among males than females. The total insane-rate for the "General" population is more than twice that for Indians. It is interesting to compare the above total insane-rate of 23.3 per 10,000 of the population with that for England and Wales for 1934 which was 37.

5. The following table gives the estimated population of the Island on December 31st of the years 1924 to 1935; also the total number of certified insane persons and the total insane-rate per 10,000 of the population of the Island for these years:

Years	Population of Colony on December 31st.	Total number of certified insane on December 31st.	Insane-rate per 10,000 of population.
1924	... 387,743	686	17.6
1925	... 393,708	700	17.7
1926	... 398,236	719	18.0
1927	... 401,693	729	18.1
1928	... 404,802	748	18.4
1929	... 405,549	759	18.7
1930	... 404,458	833	20.5
1931	... 391,044	834	21.3
1932	... 388,400	855	22.0
1933	... 390,697	895	22.9
1934	... 393,733	926	23.5
1935	... 396,271	927	23.3

The above table shows a slight decrease in the insane-rate for 1935 as compared with 1934.

6. HOSPITAL POPULATION.

There were 727 persons in hospital (males 403, females 324) on 31st December, 1935. Of these, 7 males and 2 females were under interim detention pending a decision as to their mental state, so that the total number of certified insane persons in hospital on the above date was 718 (males 396, females 322) compared with 717 (males 402, females 315) on 31st December, 1934.

Included in the 718 certified insane were 12 male and 18 female paying patients.

The daily average number resident was 730 (males 405, females 325) compared with 724 for 1934, 690 for 1933, 681 for 1932, 680 for 1931, 654 for 1930, 619 for 1929, 612 for 1928 and 1927, and 582 for 1926.

The maximum daily number resident during the year was 747 (males 417, females 330) compared with 751 (males 422, females 329) in 1934.

7. CRIMINAL MENTAL PATIENTS.

	M.	F.	T.
In hospital on 31st December, 1934...	17	—	17
Readmitted from probation leave	2	—	2
Admitted during 1935	1	—	1
Discharged or dealt with under Art. 60 of Ord. 23/1906 ...	4	—	4
Died during 1935	1	—	1
Remaining on 31st December, 1935...	15	—	15

The only criminal mental patient admitted during the year, M......... F........., a Creole aged 34, was transferred here from Beau Bassin Prison where he was serving a sentence for swindling.

8. The following table shows the duration in hospital to 31st Dcember, 1935 of the 718 certified resident patients:

	M.	F.	T.
One year or less ...	61	53	114
Between 1 and 2 years...	31	28	59
,, 2 ,, 3 ,, ...	26	25	51
,, 3 ,, 4 ,, ...	14	21	35
,, 4 ,, 5 ,, ...	23	16	39
,, 5 ,, 6 ,, ...	15	23	38
,, 6 ,, 7 ,, ...	23	10	33
,, 7 ,, 8 ,, ...	11	13	24
,, 8 ,, 9 ,, ...	14	9	23
,, 9 ,, 10 ,, ...	19	9	28
,, 10 ,, 15 ,, ...	73	28	101
,, 15 ,, 20 ,, ...	23	36	59
,, 20 ,, 25 ,, ...	22	26	48
,, 25 ,, 30 ,, ...	16	7	23
Over 30 years ...	25	18	43
Total ...	396	322	718

It will be seen from the above table that more than half of the total number of patients have been in hospital 5 years or more, the prognosis in the majority of these cases being hopeless.

9. ADMISSIONS.

	1934			1935		
	M.	F.	T.	M.	F.	T.
1st admissions, certified patients ...	71	38	109	42	45	87
2nd admissions, certified patients ...	11	7	18	10	10	20
3rd admissions, certified patients ...	—	1	1	2	2	4
4th admissions, certified patients ...	1	2	3	2	—	2
5th admissions, certified patients ...	—	—	—	1	—	1
Readmissions from probation leave	43	31	74	39	30	69
Readmissions from leave under G.N. 239/24	85	53	138	55	61	116
Admitted under interim detention, later found not to be proper persons to be kept in hospital, and accordingly released ...	17	23	40	31	25	56
Admitted under interim detention, but not certified or released on 31.12.35	4	2	6	7	2	9
Admitted under interim detention and died whilst so detained ...	—	1	1	2	4	6
Readmitted from Victoria and Civil Hospitals	1	1	2	3	1	4
Readmitted after escape ...	—	—	—	1	—	1
Total ...	233	159	392	195	180	375

The above table shows that in 1935 a total of 114 patients (males 57, females 57) were admitted into the Mental Hospital as certified insane, (1st, 2nd, 3rd, 4th and 5th admissions) and are hereunder referred to as direct admissions.

10. Table showing the districts whence came the 114 direct admissions and the insane-rate per 10,000 of the population of such districts:

Districts	No. of direct admissions.	Estimated population of districts on 31st December, 1935.	Insane-rate per 10,000 of population.
Port Louis	24	55,198	4.3
Plaines Wilhems ...	37	101,155	3.6
Grand Port	11	47,831	2.3
Pamplemousses ...	6	35,388	1.6
Rivière du Rempart ...	7	31,863	2.1
Savane	7	30,394	2.3
Moka	13	29,658	4.3
Flacq	6	51,369	1.1
Black River	3	13,415	2.2
Total ...	114	396,271	2.8

The above table shows that insanity is more prevalent in the urban and residential districts as compared with the agricultural districts.

11. The following table shows the probable causes of insanity in the case of 82 direct admissions:

CAUSES	M.	F.	T.
Heredity, insane	17	12	29
Feeblemindedness	2	2	4
Climacteric	—	2	2
Puberty and adolescence ...	—	1	1
Senility	1	1	2
Puerperium	—	16	16
Mental stress: sudden	2	2	4
,, ,, : prolonged ...	5	9	14
Privation	2	3	5
Epilepsy	4	3	7
Convulsions	2	—	2
Syphilis	2	1	3
Alcohol	8	—	8
Sepsis	1	1	2
Phthisis	—	2	2
Hookworm	1	—	1
Sunstroke	1	—	1
Diabetes Mellitus	1	—	1
Arteriosclerosis	2	1	3
Pneumonia	—	1	1
Typhoid	1	1	2
Drugs: Gandia, opium, cocaine etc.	1	—	1
Meningitis	1	—	1

In examining the above table it should be borne in mind that one or more of the causes enumerated therein may be responsible for the production of the mental illness; hence the excess of the aggregate of such causes over the number of patients considered. Heredity, mental stress, epilepsy alcohol are, as usual, prominent etiological factors. In 1935 there were an unusual number of cases of puerperal insanity: 16 in all as compared with 6 in 1933 and 3 in 1934.

12. DISCHARGES.

The total number of discharges during the year was 327 as against 307 in 1934.

The following table shows the classification of discharges for 1934 and 1935:

	1934			1935		
	M.	F.	T.	M.	F.	T.
Discharged, recovered	4	—	4	2	—	2
,, , relieved	81	40	121	80	58	138
,, , not improved ...	2	3	5	2	4	6
Discharged on leave under G.N. 239/24	82	52	134	50	63	113
Alleged mental patients found sane and released	17	23	40	36	25	61
Transferred to Victoria and Civil Hospitals	1	2	3	4	2	6
Escape	—	—	—	1	—	1
Total ...	187	120	307	175	152	327

The percentage of discharges (recovered, relieved and not improved) to admissions (direct admissions plus readmissions from probation) was 79.7 (males 87.5, females 71.2) as compared with 63.4 (males 69.0, females 54.4) for 1934. During the year 63 patients (males 37, females 26), out on probation leave, were found cured and finally discharged.

13. DEATHS

During the year there were 44 deaths (males 23, females 21), as against 28 in 1934, 35 in 1933 and 49 in 1932. Of these, 8 took place within one month of the patients' admission at the Mental Hospital and were mainly due to their poor state of health. The death-rate, calculated on the daily average number of patients resident, was 6·02% (males 5.67%, females 6.46%) compared with 3.86% (males 3.42%, females 4·44%) for 1934. The following table gives the causes of death and the number of deaths from each cause:

CAUSES	M.	F.	T.
Phthisis	1	4	5
Cerebral hæmorrhage	1	3	4
Epilepsy	4	—	4
Acute enteritis	2	1	3
Broncho-pneumonia	—	2	2
Chronic pleurisy	2	—	2
Diabetes mellitus	2	—	2
General paralysis of the insane ...	2	—	2
Gangrene of the lung	—	2	2
Acute hæmorrhagic pancreatitis ...	—	1	1
Dysentery	1	—	1
Enteric fever	—	1	1
Ankylostomiasis and malaria ...	—	1	1
Tuberculous pyosalpinx and peritonitis...	—	1	1
Chronic nephritis	1	—	1
Tuberculosis of the kidney	—	1	1
Cerebral thrombosis	1	—	1
Fractured skull	1	—	1
Puerperal septicæmia	—	1	1
Arsenical intoxication	—	1	1
Tetanus	1	—	1
Myocardial degeneration	—	1	1
Mitral regurgitation	1	—	1
Mitral and aortic regurgitation ...	—	1	1
Lobar pneumonia	1	—	1
Bronchiectasis	1	—	1
Acute bronchitis	1	—	1
Total ...	23	21	44

Thirteen postmortem examinations were made, giving a percentage of 29·5 of total deaths.

14. PREVALENCE OF SICKNESS.

The following table gives the number of cases treated in both infirmaries, the daily average of sick and the sick-rate for the years 1934, 1935:

	1934			1935		
	M.	F.	T.	M.	F.	T.
Number of cases treated in infirmaries	144	62	206	116	79	195
Daily average of sick in infirmaries	4.80	2.47	7.27	3.43	3.69	7.12
Sick-rate per cent calculated on daily average number of patients in hospitals	1.17	0.78	1.00	0.84	1.13	0.90

15. Table of monthly admissions in the two infirmaries, total stay therein and average stay per patient for the years 1934, 1935:

	1934				1935		
	M.	F.	T.		M.	F.	T.
January ...	13	1	14	January ...	13	11	24
February ...	12	3	15	February ...	13	8	21
March ...	23	6	29	March ...	3	10	13
April ...	11	8	19	April ...	13	6	19
May ...	6	10	16	May ...	8	4	12
June ...	12	3	15	June ...	12	6	18
July ...	9	4	13	July ...	7	6	13
August ...	14	8	22	August ...	8	5	13
September ...	12	3	15	September ...	8	6	14
October ...	15	5	20	October ...	8	4	12
November ...	8	7	15	November ...	13	7	20
December ...	9	4	13	December ...	10	6	16
Total ...	144	62	206	Total ...	116	79	195
Total stay in days	1,755	904	2,659	Total stay in days	1,306	1,335	2,641
Average stay per patient ...	12.18	14.58	12.90	Average stay per patient ...	11.25	16.89	13.54

The above table shows that physical diseases were slightly less prevalent in 1935 than in 1934.

16. The following table shows the monthly admissions in both infirmaries for the commoner diseases:

Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total
Malaria ...	2	7	—	4	3	1	1	1	—	—	1	2	22
Epilepsy ...	—	—	—	1	1	4	—	—	2	3	2	—	13
Abscesses ...	—	1	—	2	—	—	2	—	1	2	1	1	11
Dysentery, amœbic	1	1	—	—	—	1	1	1	—	—	1	—	6
Dysentery— other types ...	—	1	1	—	—	3	1	—	—	—	1	4	11
Phthisis ...	3	—	2	1	1	—	1	—	—	—	1	—	9
Ulcers ...	2	1	—	3	—	—	—	—	—	—	2	1	9
Fractures ...	1	—	1	—	—	1	—	1	2	1	—	—	7
Wounds by fall, cutting etc. ...	2	—	1	1	1	1	—	—	—	—	—	1	7
Chronic nephritis	3	—	—	1	—	—	—	—	1	1	—	—	6
Cerebral hæmorrhage ...	—	—	1	—	—	1	—	1	—	—	1	1	5
Diabetes mellitus	—	—	—	—	—	1	—	2	2	—	—	—	5

17. INFECTIOUS AND ALLIED DISEASES.

During the year there were 17 cases of dysentery, 6 of which were of the amœbic type. There were no cases of bacillary dysentery. Influenza cases numbered 4 as against 19 in 1934. Malaria accounted for 22 cases as against 21 in 1934. During the year 9 cases of phthisis needed active treatment 5 of whom died. There was only one case of enteric fever and this proved fatal. No patient suffered from the exanthemata.

18. Violence, Escapes etc.

There were no cases of suicide or homicide. Only one patient escaped during the year, but was recaptured and brought back four days later. The number of cases of injury to patients was as follows:

Self-inflicted	3
Inflicted by attendants ...	Nil
Inflicted by other patients ...	81
Accidental	79

The above injuries were of a trivial nature except:

(i) A severed tendo Achilles accidentally caused by the blade of a moving lawn-mower;

(ii) two accidental dislocations: one of the lower jaw and the other of the left elbow;

(iii) a fractured skull causing death. The patient climbed on to the rafters and fell down. An inquest was held on this case;

(iv) two simple fractures of the humerus. In both cases no definite cause could be found;

(v) a fracture of the right fifth metacarpal due to the finger being accidentally caught in a window;

(vi) a compound fracture of the lower jaw sustained during an epileptic fit;

(vii) a simple fracture of both bones of the forearm, at the junction of the middle and lower thirds, also sustained during an epileptic fit;

(viii) a simple fracture of the right olecranon process due to the patient's hitting his elbow against the wall in a fit of excitement.

Members of the staff were injured by patients on 28 occasions but in no case was the injury of a serious nature.

19. Table showing the classification of the 718 certified patients in hospital on 31st December, 1935, according to the types of mental disease:

TYPES OF MENTAL DISEASE	M.	F.	T.
Primary dementia	89	28	117
Senile dementia	5	7	12
Terminal dementia	115	98	213
Amentia with epilepsy	16	13	29
Amentia without epilepsy... ...	23	12	35
Mania, recent	16	21	37
Mania, recurrent	10	12	22
,, chronic	7	22	29
Melancholia, recent	21	23	44
,, , recurrent	—	—	—
,, , chronic	7	5	12
Alternating insanity	9	15	24
Paranoia	4	—	4
Paraphrenia	11	14	25
Non-systematised delusional insanity ...	11	9	20
Acute confusional insanity... ...	—	9	9
Epileptic insanity	40	32	72
General paralysis of the insane ...	3	1	4
Moral insanity	3	1	4
Insanity with gross brain lesions ...	5	—	5
Undiagnosed	1	—	1

20. Occupational Treatment

During the year a daily average of 60 patients, mostly Indians, attended to the vegetable gardens. All the laundry work of the hospital was done by female patients and this, together with ward-work, darning, the upkeep of the hospital grounds and piggery, mattress-making, carpentry and the manufacture of hospital tinware, gave employment daily to an average of 210 male and 126 female patients·

The estimated value of the work done by patients during the year, including institution garden produce, was Rs. 16,327.53·

21. Restraint and Seclusion.

During the year mechanical restraint—strait-jacket—was resorted to in the case of 1 male and 1 female, and seclusion in the case of 3 males and 2 females. The greatest duration, in any single instance, for mechanical restraint or seclusion, was 5 hours.

22. Recreation·

During 1935, the Police Band played eleven times at the hospital. Twelve cinematograph performances were given as well as two treats consisting of cakes, fruit, lemonade and other delicacies. Gramophone music is often played during the week and always on Sundays. Cards, draughts, dominoes, chess and loto are favourite games. A few of the male patients play football on the grounds of the hospital

French and English papers and periodicals were sent us by people interested in the welfare of our patients, but the number received was far below our requirements.

Special thanks are due to the local branch of Toc H for their gifts of illustrated papers and cigarettes.

The piano in the female department was occasionally used by patients, their friends and relatives·

23. Cost of Maintenance.

Items		Rs. c.
Provisions, fuel and light, not including institution garden produce		80,614.80
Personal emoluments		93,726.41
Clothing, bedding, uniforms and washing requisites		16,137.71
Drugs, dressings, surgical instruments etc.		954.80
Implements stores, sundries...		2,487.04
Fees for District Commissioners of Lunacy		1,840.00
Fees for Member of Central Board		220·00
Recreation for patients		754.42
Telephone: rental and calls		155·82
Travelling and transport		603.02
	Total	197,494.02
Less fees from private patients	Rs. 12,769.03	
Less sale price of pigs	Rs. 1,668.02	
	Less	14,437.05
	Net total expenditure	183,056.97
	Average weekly cost per head	4.80

The following table gives the net yearly total expenditure, the daily average number of patients in hospital and the average weekly cost per head, for the financial years 1926–27 to 1934--35 :

Financial years	Net total expenditure.	Daily average number of patients in hospital.	Average weekly cost per head.
1926–27 ...	Rs. 245,637·69	601	Rs. 7.86
1927–28 ...	Rs. 256,831.02	623	Rs. 7.92
1928–29 ...	Rs. 249,134.07	606	Rs. 7.90
1929–30 ...	Rs. 226,910.87	637	Rs· 6.85
1930–31 ...	Rs. 219,809·08	674	Rs. 6.27
1931–32 ...	Rs. 198,170.07	681	Rs. 5.59
1932–33 ...	Rs. 183,883.90	688	Rs. 5.14
1933–34 ...	Rs. 182,195·68	702	Rs. 4.94
1934–35 ...	Rs. 183,056.97	733	Rs. 4.80

The above table shows that the weekly cost of maintenance has again been reduced.

24. STAFF.

The staff of the hospital consists of :

1 Medical Superintendent.
1 Assistant Medical Superintendent.
1 Steward and Accountant who also acts as Head Male Nurse·
1 Dispenser and Storekeeper.
1 Matron.
1 Assistant Matron.
4 Male Nurses.
8 Male Attendants.
8 Female Nurses.
1 Gatekeeper.
1 Seamstress.
69 Male Servants.
45 Female Servants.

Mr. G· E· F. Mason went on three months' leave on 1st March, 1935, previous to his retirement from the service. He was Steward and Accountant from 1st November, 1925 to 31st May, 1927 and again from 1st July, 1929 to 31st May 1935, during the whole of which time he did excellent work for the hospital. Apart from being an intelligent, keen and trustworthy officer, Mr. Mason was blessed with a kind and cheerful disposition that endeared him to both patients and staff. At a farewell gathering held at the Hospital, the Medical Superintendent, on behalf of himself and the staff, presented Mr. Mason with a silver cigarette-box as a mark of personal regard and of appreciation for his valuable services·

Mr. Mason was replaced as Steward and Accountant by Mr. A. Guérandel, Assistant Storekeeper, Head Office, who assumed duty on 26th February, 1935.

On 14th January, 1935, Miss M. F. B· Migale was appointed Nurse, vice Miss M· Fitzgerald, resigned.

Nurse L. Dalais resigned on 30th April, 1935 and was replaced by Miss F. F. Serret on 1st June, 1935.

Mr. H. V. Orange became Male Attendant on 1st March, 1935 in the place of Mr. L. R. M· Duval whose appointment had been terminated. Male Attendant J. L. Lebrasse resigned on 22nd December, 1935·

25. ACCOMMODATION.

The hospital is still overcrowded, especially on the female side. The congested state of the female cells has reached its limit and requires urgent attention. Two female dormitories are being built to hold a total of 80 inmates, but, unfortunately, the new buildings will not help to relieve the cells, as these are inhabited by noisy, filthy and violent patients who cannot be accommodated elsewhere.

26. VISITS.

On the 11th January, 1935, four members of the Executive Council, accompanied by the Director of the Medical and Health Department and the Director of Public Works, visited the hospital in order to consider the advisability of having two new wards built on the female side to relieve its overcrowded state.

On the 23rd December, 1935, His Lordship the Bishop of Mauritius visited the hospital.

During the year the Central Board of Commissioners of Lunacy held 12 monthly meetings and on each occasion visited the hospital. Apart from his monthly visits with the Central Board, the Honourable Medical Director also called at the hospital on six other occasions. Two Boards of Survey were held and our accounts and stores were checked 9 times by an Audit Inspector.

No irregularities were found.

27. RELIGIOUS SERVICES.

During the year Mass was said on 12 occasions. There were also 2 Church of England services. An average of 40 patients attended each Roman Catholic service and 7 each Anglican service.

28. LAW CHANGES.

Government Notice No. 2 of the 4th January, 1935, was published, fixing the scale of charges for the maintenance and treatment of patients of the Mental Hospital.

29. ACKNOWLEDGMENTS.

In conclusion, I wish to thank the Honourable Medical Director and the members of the Central Board of Commissioners of Lunacy for their valuable help and advice. It is also a pleasure for me to express here my indebtedness to the members of the Staff of the institution for their steady co-operation and assistance.

J. D. DYSON, M.B., B.S., Lond.; D.P.M.
Medical Superintendent, Mental Hospital.

Beau Bassin,
26th February, 1936.

APPENDIX VII

Annual Report on the Leper Hospital for the Year 1935.

Below is given in tabular form the admissions, discharges and deaths for the year 1935.

	Males	Females
Remaining on 1.1.35	36	12
Admissions during the year	3	2
Total ...	39	14
Discharges	2	—
Deaths	1	1
Total ...	3	1
Remaining on 31.12.35	36	13

ADMISSIONS

The five admissions concern four former patients one of whom had been granted leave to proceed to Rodrigues and who returned after an absence of five weeks; two were former patients who had absconded and who were re-admitted after having relapsed; the fourth was a burnt-out case who applied for re-admission after having been discharged a year previously.

The remaining patient was an old standing case of nerve leprosy who was taken in because she was destitute.

No new case has been detected during the year.

DISCHARGES

Under this heading we have included the case already reported under admission, who was granted leave to visit his relative in Rodrigues; the second case is that of a former nodular case who had been under treatment for the past five years and who had been bacteriologically negative for one year previous to his discharge. He is apparently cured without any disabling deformity and is attending as out-patient.

DEATHS

The causes of death were (1) myocardial degeneration and heart failure, in a non-leper patient suffering from vitiligo and who died in advanced old age. (2) gangrene of foot, in an old standing nerve case.

GENERAL REMARKS.

Steady progress has to be recorded here. No patient whose condition is amenable to treatment, has deteriorated as the result of a relapse, of intercurrent disease, or from some other cause. As already reported, in previous years, the large majority of the patients are nerve cases, in whom the disease has run its course leaving behind, atrophies, mutilations and deformities. Those not so affected, have progressed steadily, if slowly in certain cases. It is futile to expect rapid change in an essentially chronic disease; a disease which affects individuals already debilitated by some previous illness or who offer diminished resistance at times of stress and strain

One hopeful feature is the apparent and increasing rarity of new cases and the falling off in the number of admisssions. The figures for the last five years are 14, 10, 5, 9 and 11.

TREATMENT.

Hydnocarpus oil, by intramuscular, subcutaneous and intradermal injections is the mainstay of the treatment in use.

During the last four months of the year treatment by intravenous injections of methylene blue (1%) has been given as extensive a trial as circumstances permitted. No remarkable change was recorded ; the old standing lesions (macules, nudules and infiltrations) took up the stain and were dyed a deep blue. The mucosa of the mouth and nose were, in certain cases, likewise affected. The dyeing of the tissues persisted for a month or more after the treatment was stopped. In certain cases this form of treatment brought out prominently, lesions the existence of which were unsuspected.

Apart from a feeling of general well-being experienced by a number of patients undergoing the treatment, and for a slow regression of the lesions in others, no dramatic change was noticed.

On the other hand, no untoward effect followed on the injections. Two patients (one male, one female) developed transient polyuria lasting 24 hours after the injection, and but two patients showed " lepra reaction " whilst under treatment.

On the whole, I believe that this form of treatment may prove advantageous to patients who react unfavourably to hydnocarpus or chaulmoogra injections or to those patients who have received a prolonged course of injections with those preparations and whose condition has a tendency to remain stationary.

VISITORS

We were honoured with the visit of His Excellency the Governor on the 23.12.35.

The Director visited the Institution on two occasions, on the second occasion he was accompanied by Dr. Arthur de Chazal.

31st January, 1936.

H. ANDRE,
Medical Superintendent, Leper Hospital and
Government Medical Officer, Pamplemousses.

STATEMENT SHOWING CONDITION, PROGRESS AND OTHER DATA OF PATIENTS UNDER TREATMENT ON 31.12.35.

No.	Name Initials.	Sex	Age	Duration of disease	Type of Disease	Progress during year.	Prognosis.	REMARKS
1.	E.H.	Male	37	13 years	C_2N_2	Slow	Poor	Prognosis poor as regards ultimate recovery without disabling deformity. Is still very active. Has greatly improved re-skin manifestations. Trophic changes have appeared with regression of cutaneous manifestations.
2.	D.R.	Male	30	11 years	N_2	Stationary	Disease-arrested	General health good.
3.	A.G.	Male	41	23 ,,	N_2	do.	do.	Is suffering from bronchial asthma. Is otherwise in good health and fairly active.
4.	L.R.	Male	42	25 ,,	N_2	do.	do.	Is a partial cripple.
5.	E.L.	Male	31	18 ,,	C_3	Nil	Prognosis bad	Is blind and in poor condition.
6.	A.B.	Male	42	16 ,,	N_2	Stationary	Fair	Was formerly C_3, who almost cleared up, but unfortunately relapsed. Is now making progress. Eyes affected and eyesight poor.
7.	S.D.	Male	75	unknown, at least 15 years.	N_2	do.	Disease-arrested	Is fairly active, in spite of senility.
8.	N.B.	Male	63	do.	N_2	do.	do.	Is a cripple.
9.	J.L.	Male	34	20 years	N_2	do.	do.	Very active in spite of much deformity and mutilations.
10.	X.L.	Male	42	16 ,,	Cured	...	...	Is blind.
11.	G.H.	Male	70	19 ,,	N_2	Stationary	Disease-arrested	Very active in spite of age and trophic changes.
12.	O.B.	Male	41	8 ,,	N_2	Good	Good	Was a former C_3. Is left with slight atrophies and sensory changes. Very active.

STATEMENT SHOWING CONDITION, PROGRESS AND OTHER DATA OF PATIENTS UNDER TREATMENT ON 31.12.35.—*Contd.*

No.	Name Initials.	Sex	Age	Duration of disease	Type of Disease	Progress during year.	Prognosis.	REMARKS
13.	E.V.	Male	66	22 ,,	N_2	Stationary	Good	Only one limb affected. Is suffering from Paget's Disease—Leprous lesions have been quiescent for years.
14.	A.M.	Male	41	23 ,,	N_2	Stationary	Poor	Is suffering from elephantiasis of both legs. Was a former C_3. Disabled from leg condition.
15.	K.B.	Male	**46**	22 ,,	N_2	do.	Disease-arrested	Is a cripple.
16.	S.N.	Male	61	13 ,,	N_2	do.	do.	......
17.	R.R.	Male	34	16 ,,	C_3N_2	Slow	Poor	Was a former patient who absconded and returned very much worse.
18.	R.J.	Male	56	21 ,,	N_2	Stationary	Disease-arrested	Is a N_2 case who has shown cutaneous manifestations in a reaction. Skin clean now.
19.	C.L.	Male	46	7 ,,	C_2	Good	Good	A former patient who absconded and was brought back after a reaction. Is doing well.
20.	E.S.	Male	43	9 ,,	N_2	Stationary	Disease-arrested	Shows mental deterioration.
21.	L.N.R.	Male	21	5 ,,	N_2	do.	do.	Elder brother a leper (No. 22).
22.	L.P.R.	Male	23	**6** ,,	Cured	Good	Excellent	Was a former C_3 case. Has no disabling deformity. Is still under observation.
23.	R.L.	Male	61	11 ,,	N_2	Stationary	Disease-arrested	......
24.	F.M.	Male	16	8 ,,	N_1	Cured	Good	Is about to be discharged.
25.	L.P.	Male	16	10 ,,	Cured	...	...	Is blind.
26.	M.R.	Male	24	13 ,,	C_3	Slow	Fair	Had progressed rapidly in recent years. Is now more or less stationary. Was a bad case when he first came up for treatment.

STATEMENT SHOWING CONDITION, PROGRESS AND OTHER DATA OF PATIENTS UNDER TREATMENT ON 31.12.35.—*Contd.*

No.	Name Initials.	Sex	Age	Duration of disease	Type of Disease	Progress during year.	Prognosis.	REMARKS
27.	V.M.	Male	37	13 years	C_1N_2	Good	Good	Was a former C_3 case. Shows trophic changes without much disability.
28.	E.G.	Male	38	18 ,,	N_2C_2	...	Poor	Was admitted in last month of year. A former N_2 patient who is now showing cutaneous lesions.
29.	R.C.	Male	16	5 ,,	C_2	Good	Good	A former C_3 case now progressing favourably.
30.	B.J.	Male	26	3 ,,	C_2N_2	Stationary	Fair	Is probably a case of longer duration than he admits. Is very active but lately has been rather severely tried by reactions.
31.	A.B.	Male	29	2 ,,	N_1N_2	Good	Good	No disabling deformity. Was admitted with trophic ulcers, thickened nerves and cutaneous anæsthesia. Is now disease arrested and is still under observation. Very active.
32.	R.C.	Male	20	8 ,,	C_3	Good	Good	A former C_3 case. Was apparently cured, but relapsed at age of 18 with C_3 lesions.
33.	A.L.	Male	3	18 months	N_1	Good	Good	Mother a leper (No. 42) from whom he was separated at the age of 18 months. Is slightly affected.
34.	R.L.	Male	77	22 years	N_2	Stationary	Disease-arrested	Is active in spite of much deformity, mutilations and old age.
35.	J.N.	Male	50	20 ,,	N_2	do.	do.	Is a cripple.
36.	B.P.	Male	40	17 ,,	N_2	do.	do.	Very active.
37.	J.B.	Female	73	11 ,,	N_1N_2	do.	do.	......
38.	H.B.	Female	56	7 ,	C_1	Slow	Good	Was a former C_3 case. Lesions retrogressing slowly.

STATEMENT SHOWING CONDITION, PROGRESS AND OTHER DATA OF PATIENTS UNDER TREATMENT ON 31.12.35.—*Contd.*

No.	Name Initials.	Sex	Age	Duration of disease	Type of Disease	Progress during year.	Prognosis.	REMARKS
39.	L.J.	Female	73	9 ,,	C_2	Stationary	Poor	Old patient liable to frequent reactions.
40.	L.D.	Female	51	21 ,,	N_2	do.	Disease-arrested	......
41.	M.M.	Female	36	16 ,,	N_2	do.	do.	A partial cripple.
42.	E.L.	Female	25	14 ,,	C_2	Good	Good	......
43.	N.P.	Female	33	18 ,,	N_2C_1	Slow	Fair	An old standing nerve case who has shown recently slight cutaneous manifestations of face and lower extremities with scanty irregularly staining bacilli.
44.	R.L.M.	Female	39	3 ,,	C_3N_2	Good	Fair	Is a case probably of longer duration than she admits. Shows extensive nerve lesions and active skin changes. Has progressed a great deal since admission. Has been under treatment for fifteen months.
45.	O.D.	Female	29	3 ,,	C_3	Good	Good	Has made remarkable progress since admission fifteen months ago. Is the mother of a hydrocephalic child (No. 46), not affected with leprosy, admitted with mother.
46.	E.V.	Female	3	...	...	...	...	Hydrocephalic child of No. 45 above. Not affected with leprosy.
47.	G.A.	Female	80	25 years	N_2	Stationary	Disease-arrested	Admitted during year, on account of old age and destitution.

H. ANDRE,
Medical Superintendent, Leper Hospital, and
Government Medical Officer, Pamplemousses.

APPENDIX VIII

Annual Report of Radiologist for the Year 1935.

Owing to Dr. Dupré's absence on leave I was left in charge of the Radiological department during the whole of 1935 except for a few days in December. I must therefore present the report on the work for that year.

Six hundred and three (603) patients underwent X Ray examination at Victoria Hospital during the year and the money collected from paying patients amounted to Rs. 606 and 84 cs.

By means of a card and index system which came into operation in June, it is now possible to keep records of patients attending for electrical treatment, of the nature of their ailments, of the treatment they receive and of the date of their attendances. The following figures are culled from these records:—

No. of patients treated from June to December by:

Ultra-Violet light	80
Infra-red	104
Diathermy	50
Galvanic and faradic current ...	31

The average for the whole year can reasonably be obtained by doubling these figures.

The fees obtained from paying patients came up to Rs. 512 and 35cs, so that the total intake at Victoria Hospital for the year amounted to Rs. 1,119 and 19 cs. The cost of Electrical energy supplied to the department for the year was Rs. 293.00 cs.

The figures for 1934 were :—

Total intake Rs. 783·38 cs.
Bill for electrical energy Rs. 236.75 cs.

It will be seen by referring to the above table that the number of patients attending for infra red treatment is far in excess of the number attending for the other kind of treatments. This accounted for by the beneficial effect of the treatment in cases of myositis, fibrositis and the different forms of arthritis especially those of gonorrheal origin. The alleviating influence of the treatment has come to be appreciated to such an extent by patients and practitioners alike, that a single apparatus is now hardly adequate to meet the Public demand. Fortunately the treatment is now also available at Civil Hospital.

Owing to a short circuit in the transformer, the X ray plant at Moka broke down and remained out of work from the 23rd September to the 6th November. In spite of this contretemps 895 patients were screened during the year, 485 for diseases of the chest and 410 for disorders of the alimentary tract.

The fees collected from paying patients came up to Rs. 414 and 50 cs.

The figures for 1934 were :—

No. of Patients examined ... 835
Fees collected ... Rs. 617 and 25 cs.

I here take the opportunity to express my appreciation of the help and courtesy which was extended to me by the Government Electrician and his staff whenever I stood in need of their assistance. It was through their skill and energy that the plant at Moka was so rapidly restored to working order. It has since given no further trouble. Advantage was taken of Dr. Dupré's presence in England to purchase an X ray plant for Civil Hospital.

Although the sum placed at his disposal was very limited, Dr. Dupré has contrived to secure quite a satisfactory plant which is now in process of erection at Civil Hospital. Two large rooms on the upper floor have been there alloted to us and will soon be transformed into an elctro-therapeutic centre commensurate with the needs of the institution.

Ultra-Violet light treatment was continued at Civil Hospital until November.

The number of patients treated were 170 and the fees collected Rs. 21.78 cs.

The work there will be resumed on the inauguration of the new department.

J. RENE PIERRE.

25th February, 1936.

APPENDIX IX

RETURN OF DISEASES AND DEATHS (IN PATIENTS) FOR THE YEAR 1935

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
I.—*Epidemic, Endemic and Infectious Diseases*					
1. Enteric Group—					
(*a*) Typhoid Fever	1	44	15	45	8
(*b*) Paratyphoid A.	—	—	—	—	—
(*c*) Paratyphoid B.	—	—	—	—	—
(*d*) Type not defined	—	—	—	—	—
2. Typhus	—	—	—	—	—
3. Relapsing Fever	—	—	—	—	—
4. Undulant Fever	—	—	—	—	—
5. Malaria—					
(*a*) Tertian	17	1,206	25	1,223	8
(*b*) Quartan	4	300	5	314	1
(*c*) Aestivo-autumnal	—	41	9	41	—
(*d*) Cachexia	6	627	38	633	9
(*e*) Blackwater	—	24	5	24	1
(*f*) Unclassified	2	588	22	590	9
6. Smallpox—					
Alastrim	—	—	—	—	—
7. Measles	—	—	—	—	—
8. Scarlet Fever	—	—	—	—	—
9. Whooping Cough	—	—	—	—	—
10. Diphtheria	1	5	—	6	—
11. Influenza	6	1,105	20	1,111	2
12. Miliary Fever	—	—	—	—	—
13. Mumps	—	—	—	—	—
14. Cholera	—	—	—	—	—
15. Epidemic diarrhœa	—	—	—	—	—
16. Dysentery—					
(*a*) Amœbic	4	361	17	365	3
(*b*) Bacillary	4	287	46	291	4
(*c*) Undefined or due to other causes	2	224	16	226	3
17. Plague—					
(*a*) Bubonic	—	—	—	—	—
(*b*) Pneumonic	—	—	—	—	—
(*c*) Septicæmic	—	—	—	—	—
(*d*) Undefined	—	—	—	—	—
18. Yellow Fever	—	—	—	—	—
Total carried forward	47	4,822	218	4,869	48

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ...	47	4,822	218	4,869	48
1—*Epidemic, Endemic and Infectious Diseases*— (Contd.)					
19. Spirochætosis icterohæmorrhagica ...	—	—	—	—	—
20. Leprosy	—	2	—	2	—
21. Erysipelas	1	71	14	72	—
22. Acute Poliomyelitis	—	—	—	—	—
23. Encephalitis Lethargica	—	—	—	—	—
24. Epidemic Cerebro-spinal Fever ...	—	—	—	—	—
25. Other Epidemic Diseases—					—
(*a*) Rubeola (German Measles) ...	—	—	—	—	—
(*b*) Varicella (Chicken-pox) ...	—	4	—	4	—
(*c*) Kala-azar	—	—	—	—	—
(*d*) Phlebotomus Fever ...	—	—	—	—	—
(*e*) Dengue	—	—	—	—	—
(*f*) Epidemic Dropsy	—	—	—	—	—
(*g*) Yaws	—	—	—	—	—
(*h*) Trypanosomiasis	—	—	—	—	—
26. Glanders	—	—	—	—	—
27. Anthrax	—	5	—	5	—
28. Rabies	—	—	—	—	—
29. Tetanus	—	40	14	40	1
30. Mycosi	—	—	—	—	—
31. Tuberculosis Pulmonary and Pharyngeal	17	478	66	495	11
32. Tuberculosis of the Meninges or Central Nervous System ..	—	—	—	—	—
33. Tuberculosis of the Intestine or Peritoneum	—	26	3	26	1
34. Tuberculosis of the Vertebral Column	2	7	—	9	2
35. Tuberculosis of Bones and Joints ...	2	18	—	20	—
36. Tuberculosis of other organs—					
(*a*) Skin or Subcutaneous Tissue Lupus	—	8	—	8	1
(*b*) Bones	1	1	—	2	—
(*c*) Lymphatic System	—	18	1	18	—
(*d*) Genito-Urinary	—	4	2	4	—
(*e*) Other Organs ...	—	21	—	21	1
37. Tuberculosis disseminated—					—
(*a*) Acute	—	—	—	—	—
(*b*) Chronic	—	—	—	—	—
Total carried forward ...	70	5,525	318	5,595	65

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward I.—*Epidemic, Endemic and Infectious Diseases*—(Ctd).	70	5,525	318	5,595	65
38. Syphilis—					
(*a*) Primary	3	43	—	46	1
(*b*) Secondary	—	42	—	45	—
(*c*) Tertiary	2	83	—	82	4
(*d*) Hereditary	—	20	6	20	—
(*e*) Period not indicated	4	51	1	55	3
(*f*) Unclassified	—	—	—	—	—
39. Soft Chancre	4	177	—	181	8
40. A.—Gonorrhœa and its complications	7	151	—	158	5
B—Gonorrhœal Ophthalmia	—	12	—	12	2
C—Gonorrhœal arthritis	—	56	—	56	2
D—Gonorrhœal Venereum	—	—	—	—	—
41. Septicæmia	1	26	16	27	1
42. Other Infectious Diseases—					
(*a*) Trypanosomiasis	—	—	—	—	—
(*b*) Filariasis	2	44	1	46	1
(*c*) Pyæmia	—	1	1	1	—
(*d*) Other	—	5	—	5	1
II.—*General Diseases not mentioned above*					
43. Cancer or other malignant Tumours of the Buccal Cavity	1	11	1	12	—
44. Cancer or other malignant Tumours of the Stomach or Liver	—	15	6	15	—
45. Cancer or other malignant Tumours of the Peritoneum, Intestines, Rectum	—	12	2	12	—
46. Cancer or other malignant Tumours of the female Genital Organs	3	104	5	107	2
47. Cancer or other malignant Tumours of the Breast	—	13	—	13	1
48. Cancer or other malignant Tumours of the Skin	—	18	1	18	—
49. Cancer or other malignant Tumours of Organs not specified	—	12	1	12	—
50. Tumours non-malignant	9	54	1	63	1
51. Acute Rheumatism	2	94	3	96	—
52. Chronic Rheumatism	6	198	—	204	4
53. Scurvy (including Barlow's Disease)	—	—	—	—	—
54. Pellagra	—	—	—	—	—
Total carried forward	114	6,767	363	6,881	101

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ...	114	6,767	363	6,881	101
II.—*General Diseases not mentioned above.*—(Contd.)					
55. Beri-Beri	—	7	—	7	—
56. Rickets	—	6	—	6	—
57. Diabetes (not including Insipidus)...	2	70	12	72	2
58. Anæmia—					
(*a*) Pernicious	1	9	—	10	1
(*b*) Other Anæmias and Chloroses	11	302	38	313	5
59. Diseases of the Pituitary Body ...	—	—	—	—	—
60. Diseases of the Thyroid Gland—					
(*a*) Exophthalmic Goitre ...	—	1	—	1	—
(*b*) Other Diseases of the Thyroid Glands, Myxœdema	—	2	—	2	—
61. Diseases of the Para-Thyroid Glands	—	—	—	—	—
62. Diseases of the Thymus	—	—	—	—	—
63. Diseases of the Supra-Renal Glands	—	—	—	—	—
64. Diseases of the Spleen	—	29	—	29	—
65. Leukœmia—					
(*a*) Leukœmia	—	2	—	2	—
(*b*) Hodgkin's Diseases	—	—	—	—	—
66. Alcoholism	—	21	—	21	—
67. Chronic poisoning by mineral substances (lead, mercury, etc.)	—	—	—	—	—
68. Chronic poisoning by organic substances (Morphia, Cocaine, etc)	—	—	—	—	—
69. Other General Diseases—					
Auto-intoxication	—	1	1	1	—
Purpura-Hæmorrhagica .	—	3	1	3	—
Hæmophilia	—	8	—	8	—
Diabetes Insipidus	—	3	—	3	—
Uræmia	—	3	3	3	—
Unclassified	—	45	1	45	—
III.—*Affections of the Nervous System and Organs of the Senses*					
70. Encephalitis (not including Encephalitis Lethargica)	—	6	—	6	—
71. Meningitis (not including Tuberculous Meningitis or Cerebrospinal Meningitis)	—	13	9	13	1
Total carried forward ...	128	7,298	428	7,426	110

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ..	128	7,298	428	7,426	110
III.—*Affections of the Nervous System and organs of the senses*—(Contd).					
72. Locomotor Ataxia	—	6	—	6	—
73. Other affections of the Spinal Cord...	—	6	—	6	—
74. Apoplexy—					
(*a*) Hæmorrhage	—	49	22	49	—
(*b*) Embolism	—	4	1	4	—
(*c*) Thrombosis	—	1	1	1	—
75. Paralysis—					
(*a*) Hemiplegia	4	61	—	65	3
(*b*) Other Paralyses	1	30	3	31	—
76. General Paralysis of the Insane ..	—	2	2	2	—
77. Other forms of Mental Alienation	—	16	—	16	—
78. Epilepsy	1	61	6	62	1
79. Eclampsia, Convulsions (non-puerperal) 5 years over	...	9	2	9	—
80. Infantile convulsions	—	13	4	13	—
81. Chorea	—	1	—	1	—
82. A—Hysteria	—	19	—	19	—
B—Neuritis	—	23	—	23	—
C—Neurasthenia	—	2	—	2	—
D.—Vertigo	—	10	—	10	—
E.—Neuralgia	1	26	—	27	—
83. Cerebral softening	—	1	1	1	—
84. Other affections of the Nervous System, such as paralysis Agitans, etc.	2	31	—	33	—
85. Affections of the Organs of Vision—					
(*a*) Diseases of the eye	—	79	—	79	6
(*b*) Conjunctivitis	1	113	—	114	—
(*c*) Trachoma	—	—	—	—	—
(*d*) Tumours of the eye ..	—	5	—	5	2
(*e*) Other affections of the eye ..	12	307	—	319	9
86. Affections of the Ear or Mastoid Sinus	1	128	1	129	4
IV.—*Affections of the Circulatory System*					
87 Pericarditis	—	4	2	4	—
88. Acute Endocarditis or Myocarditis .	—	18	3	18	—
89. Angina Pectoris	—	1	—	1	—
Total carried forward .	151	8,324	476	8,475	135

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ...	151	8,324	476	8,475	135
IV.—*Affections of the Circulatory System.*—(Contd.)					
90. Other Diseases of the Heart—					
(*a*) Vulvular—					
Mitral	3	92	15	95	4
Aortic	—	8	2	8	—
Tricuspid	—	—	—	—	—
Pulmonary	—	—	—	—	—
(*b*) Myocarditis	—	110	25	110	4
(*c*) Unclassified	—	7	5	7	—
91. Diseases of the Arteries—					
(*a*) Aneurism	1	6	2	7	—
(*b*) Arterio-Sclerosis	4	25	—	29	2
(*c*) Other Diseases	—	1	1	1	—
92. Embolism or Thrombosis (non-cerebral)	—	10	8	10	—
93. Diseases of the Veins—					
Hæmorrhoids	3	208	—	211	5
Varicose Veins	1	13	—	14	—
Phlebitis	—	5	—	5	—
94. Diseases of the Lymphatic System—					
Lymphangitis...	1	36	—	37	3
Lymphadenitis, Bubo (non-specific)	5	223	—	228	2
95. Hæmorrhage of undetermined cause	—	3	—	3	—
96. Other affections of the Circulatory System	1	27	9	28	1
V.—*Affections of the Respiratory System*					
97. Diseases of the Nasal Passages—					
Adenoids	—	18	—	18	—
Polipus	—	21	—	21	—
Rhinitis	—	11	—	11	—
Coryza...	—	—	—	—	—
Unclassified	2	30	—	32	—
98. Affections of the Larynx—					
Laryngitis	—	29	—	29	1
Other	—	—	—	—	—
99. Bronchitis—					
(*a*) Acute	5	500	27	505	5
(*b*) Chronic	1	323	22	324	4
(*c*) Unclassified	—	18	1	18	—
Total carried forward ...	178	10,048	593	10,226	166

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ..	178	10,148	593	10,226	166
V.—*Affections of the Respiratory System*—(Contd.)					
100. Broncho-Pneumonia	1	126	45	127	—
101. Pneumonia—					
(*a*) Lobar	4	149	59	153	4
(*b*) Unclassified	2	364	107	366	5
102. Pleurisy, Emphysema	2	91	9	93	2
103. Congestion of the Lungs .. .	1	42	7	43	—
104. Gangrene of the Lungs	—	9	4	9	—
105. Asthma	3	279	9	282	5
106. Pulmonary Emphysema	—	7	1	7	—
107. Other affections of the Lungs—					
Pulmonary Spirochætosis	1	2	1	3	1
Unclassified	—	27	—	27	—
VI.—*Diseases of the Digestive System*					
108. A—Diseases of teeth or gums—					
Caries, Pyorrhœa, etc. .	1	185	1	186	3
B—Other affections of the Mouth—					
Stomatitis	—	27	2	7	—
Glossitis, etc.	—	5	1	5	—
109. Affections of the Pharynx or Tonsils—					
Tonsilitis	1	215	2	216	2
Pharyngitis	—	12	—	12	—
Other	—	5	—	5	—
110. Affections of the Œsophagus ...	—	—	—	—	—
111. A—Ulcer of the Stomach ...	2	56	8	58	2
B.—Ulcer of the Duodenum .	1	84	8	85	2
112. Other affections of the Stomach—					
Gastritis	1	175	—	176	—
Dyspepsia, etc.	1	195	—	196	3
113. Diarrhœa and Enteritis—					
Under two years	1	77	19	78	1
114. Diarrhœa and Enteritis—					
Two years and over ...	5	458	51	463	6
Colitis	2	44	1	46	1
Ulceration	—	7	—	7	—
114a Sprue	—	2	—	2	1
115. Ankylostomiasis	31	2,492	99	2,523	24
Total carried forward ..	238	15,183	1,027	15,421	228

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward	238	15,183	1,027	15,421	228
VI.—*Diseases of the Digestive System*—(Contd.)					
116. Diseases due to Intestinal Parasites—					
(*a*) Cestodia (Tænia)	—	4	—	4	—
(*b*) Trematoda (Flukes)	—	—	—	—	—
(*c*) Nematoda (other than ankylostoma)—					
Ascaris	1	142	6	143	—
Trichocephalus dispar	—	2	—	2	—
Trichinia	—	5	—	5	—
Dracunculus	—	—	—	—	—
Strongylus	—	7	—	7	—
Oxyuris	—	6	—	6	—
(*d*) Coccidia	—	—	—	—	—
(*e*) Other parasites	—	58	—	58	—
117. Appendicitis	7	232	2	239	—
118. Hernia	2	150	5	152	2
119. A.—Affections of the Anus, Fistula, etc.	1	126	—	127	1
B.—Other affections of the Intestines—					
Enteroptosis	—	—	—	—	—
Constipation	1	52	—	53	—
Unclassified	—	11	6	11	—
120. Acute yellow atrophy of the Liver	—	—	—	—	—
121. Hydatid of the Liver	—	—	—	—	—
122. Cirrhosis of the Liver—					
(*a*) Alcoholic	—	—	—	—	—
(*b*) Other forms	—	93	11	93	1
123. Biliary Calculus	1	12	—	13	—
124. Other affections of the Liver—					
Abscess	—	29	5	29	—
Hepatitis	1	104	10	105	1
Cholecystitis	—	90	2	90	2
Jaundice	1	45	2	46	2
Unclassified	—	—	—	—	—
125. Diseases of the Pancreas	—	10	3	10	—
126. Peritonitis (of unknown cause)	—	7	2	7	—
127. Other affections of the Digestive System	16	183	9	199	7
Total carried forward	269	16,551	1,090	16,820	241

DISEASES	Remaining in Hospital at end of 1934	Yearly Total Admissions	 Deaths	Total cases treated	Remaining in Hospital at end of 1935
Brought forward ..	269	16,551	1,090	16,820	244
VII.—*Diseases of the Genito-urinary System* (*non-Venereal*)					
128. Acute Nephritis	7	270	39	277	4
129. Chronic Nephritis	—	124	23	124	2
130. A.—Chyluria	—	3	—	3	—
B.—Schistosomiasis	—	50	—	50	—
131 Other affections— Pyelitis, etc.	—	104	18	104	2
132. Urinary Calculus	—	31	3	31	—
133. Diseases of the Bladder—					
Cystitis	4	130	1	134	—
Unclassified	—	2	—	2	—
134. Diseases of the Urethra—					
(*a*) Stricture	4	64	2	68	4
(*b*) Other	—	144	—	144	1
135. Diseases of the Prostate—					
Hypertrophy	—	2	—	2	—
Prostatitis	—	34	1	34	—
Unclassified	—	—	—	—	—
136. Diseases (non-Venereal) of the Genital Organs of Man—					
Epididymitis	—	17	—	17	—
Orchitis	2	102	—	104	—
Hydrocele	2	205	—	207	2
Ulcer of Penis...	1	24	—	25	1
Unclassified	—	18	—	18	—
137. Cysts or other non-malignant Tumours of the Ovaries	—	17	1	17	—
138. Salpingitis	3	92	3	95	1
Abscess of the Pelvis ..	2	54	2	56	—
139. Uterine Tumours (non-malignant)	—	4	—	4	—
140. Uterine Hæmorrhage (non-puerperal)	—	46	—	46	1
141. A.—Metritis	1	25	1	26	—
B.—Other affections of the Female Genital Organs—					
Displacements of Uterus ..	—	69	—	69	—
Menorrhagia	—	28	—	28	—
Amenorrhœa	—	7	—	7	—
Dismenorrhœa	—	8	—	8	—
Leucorrhœa	4	76	—	80	1
Fibroma of Uterus	1	8	2	9	—
Unclassified	—	56	—	56	1
Total carried forward ...	300	18,365	1,186	18,665	264

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ..	300	18,365	1,186	18,665	264
VII.—*Diseases of the Genito-urinary System (non-Venereal)*—(Contd.)					
142. Diseases of the Breast (non-puerperal)—					
Mastitis	—	21	—	21	—
Abscess	2	252	—	254	4
Unclassified	—	—	—	—	—
VIII.—*Puerperal State*					
143. A.—Normal Labour	6	996	3	1,002	17
B.—Accidents of Pregnancy—					
(*a*) Abortion	—	104	—	104	2
(*b*) Ectopic Gestatio	1	5	2	6	—
(*c*) Other accidents of Pregnancy...	18	630	22	648	11
144. Puerperal Hæmorrhage	—	1	—	1	—
145. Other accidents of Parturition ...	—	27	6	27	1
146. Puerperal Septicæmia	—	21	10	21	—
147. Phlegmasia Dolens	—	2	—	2	—
148. Puerperal Eclampsia	—	12	5	12	—
149. Sequelæ of Labour	—	10	6	10	—
150. Puerperal affections of the Breast...	—	—	—	—	—
IX.—*Affections of the Skin and Cellular Tissues*					
151. Gangrene	3	40	8	43	3
152. Boil—					
Carbuncle	3	131	1	134	1
153. Abscess—					
Whitlow	3	26	—	29	—
Cellulitis	4	579	9	583	13
Unclassified	37	1,778	20	1,815	57
154. A.—Tinea	—	—	—	—	—
B.—Scabies	3	289	—	292	9
155. Other Diseases of the Skin—					
Brythema	—	1	—	1	—
Urticaria	—	4	—	4	—
Eczema	3	145	—	148	3
Herpes	—	2	—	2	—
Psoriasis	—	16	—	16	—
Elephantiasis	—	15	—	15	—
Myiasis	—	14	—	14	1
Chigœs	—	—	—	—	—
Cutaneous Leishmaniasis ...	—	—	—	—	—
Other	13	307	2	320	8
Total carried forward ...	396	23,793	1,280	24,189	394

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ...	396	23,793	1,280	24,189	394
X.—*Diseases of the Bones and Organs of Locomotion (other than Tuberculous)*					
156. Diseases of Bones—					
Osteitis	1	47	—	48	1
157. Diseases of Joints—					
Arthritis	12	176	2	188	4
Synovitis	1	30	—	31	—
158. Other Diseases of Bones or Organs of Locomotion	9	65	1	74	1
XI.—*Malformations*					
159. Malformations—					
Hydrocephalus	—	—	—	—	—
Hypospadias	—	—	—	—	—
Spina Bifida, etc.	—	23	1	23	—
XII.—*Diseases of Infancy*					
160. Congenital Debility	2	79	40	81	—
161. Premature Birth	1	65	40	66	—
162. Other affections of Infancy ...	—	15	5	15	—
163. Infant neglect (infants of three months or over)	—	—	—	—	—
XIII.—*Affections of Old Age*					
164. Senility—	—	76	10	76	1
Senile Dementia, etc.	—	62	2	62	—
XIV.—*Affections produced by External Causes*					
165. Suicide by Poisoning	2	9	1	11	—
166. Corrosive Poisoning (intentional) .	—	7	2	7	—
167. Suicide by Gas Poisoning ...	—	—	—	—	—
Total carried forward ..	424	24,447	1,384	24,871	401

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ...	424	24,447	1,384	24,871	401
XIV.—*Affections produced by External Causes.*—(Contd.)					
168. Suicide by Hanging or Strangulation	—	1	—	1	—
169. Suicide by Drowning	—	—	—	—	—
170. Suicide by Firearms	—	—	—	—	—
171. Suicide by cutting or stabbing Instruments	—	2	1	2	—
172. Suicide by jumping from a height	—	—	—	—	—
173. Suicide by crushing	—	—	—	—	—
174. Other Suicides	—	—	—	—	—
175. Food Poisoning— Botulism	1	—	—	1	—
176. Attacks of poisonous animals— Snake Bite	—	—	—	—	—
Insect Bite	—	—	—	—	—
177. Other accidental Poisonings ...	1	16	1	17	—
178. Burns (by fire)	3	77	15	80	—
179. Burns (other than by fire) ...	—	73	5	73	4
180. Suffocation (accidental)	—	—	—	—	—
181. Poisoning by Gas (accidental) ...	—	—	—	—	—
182. Drowning (accidental)	—	1	—	1	—
183. Wounds (by Firearms, war excepted)	—	12	3	12	1
184. Wounds (by cutting or stabbing Instruments)	3	445	4	448	5
185. Wounds (by fall)	3	160	5	163	1
186. Wounds (in mines or quarries) ...	—	—	—	—	—
187. Wounds (by machinery)	—	31	1	31	—
188. Wounds (by crushing *e.g.* railway accidents, etc.)	1	145	5	146	1
189. Injuries inflicted by animals, Bites, Kicks, etc.	—	39	2	39	—
190. Wounds inflicted on Active Service	—	—	—	—	—
191. Executions of civilians by belligerents	—	—	—	—	—
192. A—Over Fatigue	—	—	—	—	—
B—Hunger or Thirst	—	1	—	1	—
193. Exposure to cold, Frost bite, etc. ..	—	—	—	—	—
194. Exposure to heat— Heatstroke	—	—	—	—	—
Sunstroke	—	—	—	—	—
Total carried forward ..	436	25,450	1,426	25,886	413

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
Brought forward ..	436	25,450	1,426	25,886	413
XIV.—*Affections produced by External Causes.*—(Contd.)					
195. Lightning Stroke	—	—	—	—	—
196. Electric Shock	—	—	—	—	—
197. Murder by Firearms	—	—	—	—	—
198. Murder by cutting or stabbing Instruments	—	—	—	—	—
199. Murder by other means	—	—	—	—	—
200. Infanticide (Murder of an infant under one year)	—	—	—	—	—
201. A—Dislocation	1	46	—	47	—
B—Sprain	—	41	—	41	1
C—Fracture	14	371	11	385	19
202. Other external Injuries	24	1,090	9	1,114	16
203. Death by violence of unknown cause	—	—	—	—	—
XV.—*Ill-Defined Diseases*					
204. Sudden Deaths [cause unknown]—	—	—	—	—	—
205. A.—Diseases not already specified or ill-defined—					
Ascites	4	98	5	102	—
Œdema	—	30	3	30	—
Asthenia	—	10	—	10	—
Shock	—	7	3	7	—
Hyperpyrexia	—	2	—	2	—
Other	1	231	—	232	2
B.—Malingering	—	8	—	8	—
C.—Other	2	42	—	44	—
Total	482	27,426	1,457	27,908	451

DISEASES	Remaining in Hospital at end of 1934	Yearly Total		Total cases treated	Remaining in Hospital at end of 1935
		Admissions	Deaths		
I.—Epidemic, Endemic & Infectious Diseases	93	6,236	343	6,329	93
II.—General Diseases not mentioned above	35	1,043	76	1,078	16
III.—Affections of the Nervous System and Organs of the Senses ..	23	1,022	52	1,045	26
IV.—Affections of the Circulatory System...	19	797	72	816	21
V.—Affections of the respiratory System	22	2,046	292	2,068	27
VI.—Diseases of the Digestive System	77	5,407	255	5,484	61
VII.—Diseases of the Genito-Urinary System (*non-venereal*)... ..	33	2,087	96	2,120	24
VIII.—Puerperal State	25	1,808	54	1,833	31
IX.—Affections of the Skin and Cellular Tissues...	69	3,347	40	3,416	95
X.—Diseases of Bones and Organs of Locomotion (*other than Tuberculous*)	23	318	3	341	6
XI.—Malformations	—	23	1	23	—
XII.—Diseases of Infancy	3	159	85	162	—
XIII.—Affections of Old Age	—	138	12	138	1
XIV.—Affections produced by external Causes...	53	2,567	65	2,620	48
XV.—Ill-defined Diseases	7	428	11	435	2
TOTAL	482	27,426	1,457	27,908	451

RETURN OF BIRTHS

	Number	Deaths
Born alive at term...	782	47
Prematurely born	112	36
Still-born	206	206
Total ...	1,100	289

RETURN OF SURGICAL OPERATIONS

Operations	Number	Deaths
Operations :—		
Tumours	19	3
Evacuation of abscesses ...	3,122	31
Operations on :—		
Blood Vessels	3	—
Lymphatic Glands... ...	82	1
Skin and Subcutaneous Tissues	230	—
Bones	131	3
Nerves	1	—
Joint	21	—
Muscles and Tendons ...	43	—
Skull and Brain	25	1
Eye	193	—
Ear	41	—
Head and Face	123	2
Chest	22	—
Abdominal Cavity	492	39
Spleen	6	1
Rectum and Anus	197	2
Urinary system	52	3
Male Generative Organs ...	211	1
Female Generative Organs...	138	7
Amputation	92	9
Obstetric Operations	74	8
Other Operations	2,191	2
Total ...	7,509	113

APPENDIX X

RETURN OF DISEASES (OUT PATIENTS) FOR THE YEAR 1935

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
I.—*Epidemic, Endemic and Infectious Diseases*				
1. Enteric Group—				
(*a*) Typhoid Fever	5	5	5	5
(*b*) Paratyphoid A.	—	—	—	—
(*c*) Paratyphoid B.	—	—	—	—
(*d*) Type not defined	—	—	—	—
2. Typhus	—	—	—	—
3. Relapsing Fever	—	—	—	—
4. Undulant Fever	—	—	—	—
5. Malaria—				
(*a*) Tertian	—	—	—	—
(*b*) Quartan	—	—	—	—
(*c*) Aestivo-autumnal	—	—	—	—
(*d*) Cachexia	2,133	2,269	2,948	3,203
(*e*) Blackwater	4	4	4	4
(*f*) Unclassified	24,594	23,927	31,638	32,136
6. Smallpox—				
Alastrim	—	—	—	—
7. Measles	—	—	—	—
8. Scarlet Fever	—	—	—	—
9. Whooping Cough	10	12	16	23
10. Diphtheria	2	1	2	1
11. Influenza	9,960	9,878	12,617	12,086
12. Miliary Fever	—	—	—	—
13. Mumps	8	9	8	9
14. Cholera	—	—	—	—
15. Epidemic diarrhœa	1,551	966	2,982	1,511
16. Dysentery—				
(*a*) Amœbic	1,531	1,247	2,907	2,326
(*b*) Bacillary	163	129	252	199
(*c*) Undefined or due to other causes	751	493	1,066	725
17. Plague—				
(*a*) Bubonic	—	—	—	—
(*b*) Pneumonic	—	—	—	—
(*c*) Septicæmic	—	—	—	—
(*d*) Undefined	—	—	—	—
18. Yellow Fever	—	—	—	—
Total carried forward	40,712	38,940	54,445	52,228

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ...	40,712	38,940	54,445	52,228
I—*Epidemic, Endemic and Infectious Diseases*— (Contd.)				
19. Spirochætosis icterо-hæmorrhagica	—	—	—	—
20. Leprosy	—	—	—	—
21. Erysipelas	6	8	8	8
22. Acute Poliomyelitis	—	1	—	1
23. Encephalitis Lethargica	1	—	1	—
24. Epidemic Cerebro-spinal Fever ...	—	—	—	—
25. Other Epidemic Diseases—				
(*a*) Rubeola (German Measles) ...	—	—	—	—
(*b*) Varicella (Chicken-pox) ...	1	—	2	—
(*c*) Kala-azar	—	—	—	—
(*d*) Phlebotomus Fever ...	—	—	—	—
(*e*) Dengue	—	—	—	—
(*f*) Epidemic Dropsy	—	—	—	—
(*g*) Yaws	—	—	—	—
(*h*) Trypanosomiasis	—	—	—	—
26. Glanders	1	1	1	1
27. Anthrax	9	8	17	19
28. Rabies	—	—	—	—
29. Tetanus	5	3	5	3
30. Mycosis	2	—	2	—
31. Tuberculosis Pulmonary and Pharyngeal	659	450	1,537	995
32. Tuberculosis of the Meninges or Central Nervous System ...	—	—	—	—
33. Tuberculosis of the Intestine or Peritoneum	1	1	2	1
34. Tuberculosis of the Vertebral Column	—	—	—	—
35. Tuberculosis of Bones and Joints ...	3	1	3	1
36. Tuberculosis of other organs—				
(*a*) Skin or Subcutaneous Tissue Lupus	2	—	7	—
(*b*) Bones	2	—	2	—
(*c*) Lymphatic System	8	9	8	17
(*d*) Genito-Urinary	6	—	6	—
(*e*) Other Organs	—	—	—	—
37. Tuberculosis disseminated—				
(*a*) Acute	19	15	19	16
(*b*) Chronic	2	9	7	15
Total carried forward ...	41,439	39,446	56,072	53,805

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ...	41,439	39,446	56,072	53,305
I.—*Epidemic, Endemic and Infectious Diseases*—(Ctd).				
38. Syphilis—				
(*a*) Primary	130	48	510	256
(*b*) Secondary	102	40	490	178
(*c*) Tertiary	167	90	570	419
(*d*) Hereditary	20	15	30	39
(*e*) Period not indicated ...	81	47	689	536
(*f*) Unclassified	—	—	—	—
39. Soft Chancre	256	17	1,005	85
40. A.—Gonorrhœa and its complications	822	481	2,191	1,156
B—Gonorrhœal Ophthalmia ...	6	2	10	2
C—Gonorrhœal arthritis	64	31	151	52
D—Gonorrhœal Venereum ...	34	13	48	17
41. Septicæmia	—	—	—	—
42. Other Infectious Diseases—				
(*a*) Trypanosomiasis	—	—	—	—
(*b*) Filariasis	32	32	56	43
(*c*) Other	40	34	160	126
II.—*General Diseases not mentioned above*				
43. Cancer or other malignant Tumours of the Buccal Cavity	—	1	—	1
44. Cancer or other malignant Tumours of the Stomach or Liver ...	7	1	7	1
45. Cancer or other malignant Tumours of the Peritoneum, Intestines, Rectum	—	—	—	—
46. Cancer or other malignant Tumours of the female Genital Organs ...	—	2	—	2
47. Cancer or other malignant Tumours of the Breast	—	6	—	25
48. Cancer or other malignant Tumours of the Skin	—	—	—	—
49. Cancer or other malignant Tumours of Organs not specified	60	45	70	48
50. Tumours non-malignant	22	5	32	5
51. Acute Rheumatism	737	693	1,497	1,460
52. Chronic Rheumatism	2,488	2,352	3,346	3,476
53. Scurvy (including Barlow's Disease)	—	1	—	1
54. Pellagra	—	—	—	—
Total carried forward ...	46,507	43,402	66,934	61,233

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ...	46,507	43,402	66,934	61,233
II.—*General Diseases not mentioned above.*—(Contd.)				
55. Beri-Beri	2	—	2	—
56. Rickets	6	2	8	2
57. Diabetes (not including Insipidus)...	60	84	112	204
58. Anæmia—				
(*a*) Pernicious	27	23	33	51
(*b*) Other Anæmias and Chloroses	1,123	1,615	2,128	2,331
59. Diseases of the Pituitary Body ...	—	—	—	—
60. Diseases of the Thyroid Gland—				
(*a*) Exophthalmic Goitre ...	1	1	1	1
(*b*) Other Diseases of the Thyroid Glands, Myxœdema	—	1	—	1
61. Diseases of the Para-Thyroid Glands	—	1	—	3
62. Diseases of the Thymus	—	—	—	—
63. Diseases of the Supra-Renal Glands	—	—	—	—
64. Diseases of the Spleen	283	194	384	267
65. Leukœmia—				
(*a*) Leukœmia	—	—	—	—
(*b*) Hodgkin's Diseases	—	1	—	1
66. Alcoholism	1	—	1	—
67. Chronic poisoning by mineral substances (lead, mercury, etc.) ..	—	—	—	—
68. Chronic poisoning by organic substances (Morphia, Cocaine, etc)	—	—	—	—
69. Other General Diseases—				
Auto-intoxication	—	—	—	—
Purpura-Hæmorrhagica .	1	—	1	—
Hæmophilia	1	1	1	1
Avitaminosis A	21	18	26	22
Diabetes Insipidus	1	2	2	3
Unclassified	251	407	281	434
III.—*Affections of the Nervous System and Organs of the Senses*				
70. Encephalitis (not including Encephalitis Lethargica)	—	—	—	—
71. Meningitis (not including Tuberculous Meningitis or Cerebrospinal Meningitis)	—	1	—	1
Total carried forward ...	48,285	45,753	69,914	64,555

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ..	48,285	45,753	69,914	64,555
III.—*Affections of the Nervous System and organs of the senses*—(Contd).				
72. Locomotor Ataxia	—	—	—	—
73. Otheraffections of the Spinal Cord ...	—	—	—	—
74. Apoplexy—				
(*a*) Hæmorrhage...	5	3	5	4
(*b*) Embolism	—	—	—	—
(*c*) Thrombosis	—	—	—	—
75. Paralysis—				
(*a*) Hemiplegia	81	35	226	75
(*b*) Other Paralyses	30	20	70	39
76. General Paralysis of the Insane ...	1	—	1	—
77. Other forms of Mental Alienation .	1	3	3	3
78. Epilepsy	104	112	252	295
79. Eclampsia, Convulsions (non-puerperal) 5 years over	35	21	53	38
80. Infantile convulsions	95	84	109	105
81. Chorea	1	2	2	2
82. A—Hysteria	—	26	—	31
B—Neuritis	160	229	222	329
C—Neurasthenia	31	22	64	55
83. Cerebral softening	—	—	—	—
84. Other affections of the Nervous System, such as paralysis Agitans, etc.	669	879	1,015	1,433
85. Affections of the Organs of Vision—				
(*a*) Diseases of the eye	358	323	761	572
(*b*) Conjunctivitis	682	610	1,054	1,131
(*c*) Trachoma	—	—	—	—
(*d*) Tumours of the eye	7	—	9	—
(*e*) Other affections of the eye ..	466	543	721	808
86. Affections of the Ear or Mastoid Sinus	920	890	1,337	1,191
IV.—*Affections of the Circulatory System*				
87. Pericarditis	80	101	87	112
88. Angina Pectoris	2	—	2	—
89. Acute Endocarditis or Myocarditis ..	41	54	59	79
Total carried forward ...	52,054	49,710	75,966	70,857

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ...	52,054	49,710	75,966	70,857
IV.—*Affections of the Circulatory System.*—(Contd.)				
90. Other Diseases of the Heart—				
(*a*) Vulvular—				
Mitral	129	143	179	177
Aortic	15	15	24	28
Tricuspid	0	17	10	26
Pulmonary	—	—	—	—
(*b*) Myocarditis	185	248	291	379
(*c*) Unclassified	52	79	62	100
91. Diseases of the Arteries—				
(*a*) Aneurism	7	4	12	7
(*b*) Arterio-Sclerosis	235	252	339	478
(*c*) Other Diseases	25	33	32	44
92. Embolism or Thrombosis (non-cerebral)	—	—	—	—
93. Diseases of the Veins—				
Hæmorrhoids	376	164	501	219
Varicose Veins	2	8	2	12
Phlebitis	7	10	15	12
94. Diseases of the Lymphatic System—				
Lymphangitis...	66	48	86	67
Lymphadenitis, Bubo (non-specific)	170	66	278	111
95. Hæmorrhage of undetermined cause	54	62	72	106
96. Other affections of the Circulatory System	157	223	289	357
V.—*Affections of the Respiratory System*				
97. Diseases of the Nasal Passages—				
Adenoids	3	—	3	—
Polipus	15	1	16	2
Rhinitis	76	96	106	123
Coryza...	37	26	59	38
Unclassified	11	15	15	17
98. Affections of the Larynx—				
Laryngitis	92	128	148	214
Other	—	—	—	—
99. Bronchitis—				
(*a*) Acute	2,031	1,313	2,602	1,691
(*b*) Chronic	1,277	877	1,840	1,329
(*c*) Unclassified	330	451	369	471
Total carried forward ...	57,414	53,989	83,300	76,765

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ...	57,414	53,989	83,300	76,765
V.—*Affections of the Respiratory System*—(Contd.)				
100. Broncho-Pneumonia . ..	51	45	68	50
101. Pneumonia—				
(*a*) Lobar	126	55	137	72
(*b*) Unclassified	72	43	75	46
102. Pleurisy, Emphysema	55	33	63	38
103. Congestion of the Lungs	39	39	39	39
104. Gangrene of the Lungs	—	—	—	—
105. Asthma	1,217	1,001	2,108	1,707
106. Pulmonary Emphysema	32	10	63	18
107. Other affections of the Lungs—				
Pulmonary Spirochætosis .	—	—	—	—
Unclassified	67	43	86	73
VI.—*Diseases of the Digestive System*				
108. A—Diseases of teeth or gums—				
Caries, Pyorrhœa, etc. ...	4,736	4,076	5,486	4,857
B—Other affections of the Mouth—				
Stomatitis	406	317	547	417
Glossitis, etc.	68	67	85	87
109. Affections of the Pharynx or Tonsils—				
Tonsilitis	304	403	394	554
Pharyngitis	134	226	195	330
Other	2	3	2	3
110. Affections of the Œsophagus ...	15	12	31	18
111. A—Ulcer of the Stomach ...	28	17	39	17
B.—Ulcer of the Duodenum ...	23	3	23	3
112. Other affections of the Stomach—				
Gastritis	1,124	1,344	1,542	1,822
Dyspepsia, etc.	1,769	1,388	2,287	2,164
113. Diarrhœa and Enteritis—				
Under two years	549	696	769	802
114. Diarrhœa and Enteritis—				
Two years and over ..	1,752	1,407	2,165	1,828
Colitis	157	180	212	258
Ulceration	—	—	—	—
114a Sprue	—	—	—	—
115. Ankylostomiasis	8,861	10,664	12,702	16,025
Total carried forward ...	79,001	76,361	112,418	107,993

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ...	79,001	76,361	112,418	107,993
VI.—*Diseases of the Digestive System.*—(Contd.)				
116. Diseases due to Intestinal Parasites—				
(*a*) Cestodia (Tænia)	1	—	1	—
(*b*) Trematoda (Flukes)	—	—	—	—
(*c*) Nematoda (other than ankylostoma)—				
Ascaris	2,570	2,889	3,392	3,800
Trichocephalus dispar ..	1	3	2	3
Trichinia	—	—	—	—
Dracunculus	—	—	—	—
Strongylus	—	—	—	—
Oxyuris	38	28	75	76
(*d*) Coccidia	—	—	—	—
(*e*) Other parasites	555	595	735	730
(*f*) Unclassified	—	—	—	—
117. Appendicitis	51	62	64	72
118. Hernia	99	6	112	8
119. A.—Affections of the Anus, Fistula, etc.	71	27	124	59
B.—Other affections of the Intestines—				
Enteroptosis	—	2	—	3
Constipation	1,266	1,431	1,507	1,721
Unclassified	138	148	184	197
120. Acute yellow atrophy of the Liver..	—	—	—	—
121. Hydatid of the Liver	—	—	—	—
122. Cirrhosis of the Liver—				
(*a*) Alcoholic	1	—	1	—
(*b*) Other forms	22	7	52	14
123. Biliary Calculus	5	2	6	2
124. Other affections of the Liver—				
Abscess...	5	1	7	1
Hepatitis	471	225	585	309
Cholecystitis	62	59	79	77
Jaundice	44	41	56	64
Unclassified	—	1	—	1
125. Diseases of the Pancreas	—	—	—	—
126. Peritonitis (of unknown cause) ..	—	—	—	—
127. Other affections of the Digestive System	566	545	671	748
Total carried forward ...	84,967	82,433	120,071	115,878

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward .	84,967	82,433	120,071	115,878
VII.—*Diseases of the Genito-urinary System (non-Venereal)*				
128. Acute Nephritis	315	256	450	393
129. Chronic Nephritis	230	201	396	340
130. A.—Chyluria	2	7	3	11
B.—Schistosomiasis	164	66	421	157
131 Other affections—				
Pyelitis, etc.	61	58	79	74
132. Urinary Calculus	8	—	9	—
133. Diseases of the Bladder—				
Cystitis	340	193	459	291
Unclassified	11	5	11	5
134. Diseases of the Urethra—				
(*a*) Stricture	21	—	31	—
(*b*) Other	25	4	32	4
135. Diseases of the Prostate—				
Hypertrophy	17	—	23	—
Prostatitis	21	—	21	—
Unclassified	3	—	4	—
136. Diseases (non-Venereal) of the Genital Organs of Man—				
Epididymitis	28	—	39	—
Orchitis	223	—	266	—
Hydrocele	164	—	199	—
Ulcer of Penis...	52	—	135	—
Unclassified	45	—	55	—
137. Cysts or other non-malignant Tumours of the Ovaries	—	—	—	—
138. Salpingitis	—	138	—	192
Abscess of the Pelvis ..	—	—	—	—
139. Uterine Tumours (non-malignant)	—	4	—	4
140. Uterine Hæmorrhage (non-puerperal)	—	181	—	228
141. A.—Metritis	—	64	—	74
B.—Other affections of the Female Genital Organs—				
Displacements of Uterus ..	—	31	—	32
Amenorrhœa	—	417	—	563
Dismenorrhœa	—	304	—	440
Leucorrhœa	—	677	—	1,387
Unclassified	—	92	—	111
Total carried forward ...	86,697	85,131	122,704	120,184

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ...	86,697	85,131	122,704	120,184
VII.—*Diseases of the Genito-urinary System (non-Venereal)*—(Contd.)				
142. Diseases of the Breast (non-puerperal)—				
Mastitis	—	85	—	120
Abscess	—	202	—	548
Unclassified	—	21	—	25
VIII.—*Puerperal State*				
143. A.—Normal Labour	—	136	—	136
B.—Accidents of Pregnancy—				
(*a*) Abortion	—	21	—	21
(*b*) Ectopic Gestation	—	—	—	—
(*c*) Other accidents of Pregnancy...	—	39	—	43
144. Puerperal Hæmorrhage	—	—	—	—
145. Other accidents of Parturition ...	—	—	—	—
146. Puerperal Septicæmia	—	1	—	1
147. Phlegmasia Dolens	—	—	—	—
148. Puerperal Eclampsia	—	—	—	—
149. Sequelæ of Labour	—	136	—	136
150. Puerperal affections of the Breast...	—	—	—	—
IX.—*Affections of the Skin and Cellular Tissues*				
151. Gangrene	11	7	35	10
152. Boil—				
Carbuncle	370	227	452	309
153. Abscess—				
Whitlow	231	199	518	443
Cellulitis	899	682	1,402	1,123
Unclassified	809	646	2,069	1,499
154. A.—Tinea	4	19	9	24
B.—Scabies	3,385	2,196	4,372	2,793
155. Other Diseases of the Skin—				
Brythema	10	5	12	6
Urticaria	92	109	118	125
Eczema	601	602	801	749
Herpes	63	39	83	49
Psoriasis	137	159	224	236
Elephantiasis	25	33	36	44
Myiasis	—	—	—	—
Chigœs	—	—	—	—
Cutaneous Leishmaniasis ..	7	9	11	16
Other	759	496	1,017	645
Total carried forward ..	94,100	91,200	133,863	129,285

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ..	94,100	91,200	133,863	129,285
X.—*Diseases of the Bones and Organs of Locomotion (other than Tuberculous)*				
156. Diseases of Bones—				
Osteitis	23	18	24	18
157. Diseases of Joints—				
Arthritis	205	202	325	260
Synovitis	33	20	42	30
158. Other Diseases of Bones or Organs of Locomotion	13	29	15	38
XI.—*Malformations*				
159. Malformations—				
Hydrocephalus	1	—	1	—
Hypospadias	—	—	—	—
Spina Bifida, etc.	—	—	—	—
Unclassified	1	—	1	—
XII.—*Diseases of Infancy*				
160. Congenital Debility	22	21	36	29
161. Premature Birth	—	—	—	—
162. Other affections of Infancy ..	59	95	89	153
163. Infant neglect (infants of three months or over)	—	—	—	—
XIII.—*Affections of Old Age*				
164. Senility—				
Senile Dementia, etc.	312	281	422	396
XIV.—*Affections produced by External Causes*				
165. Suicide by Poisoning	—	1	—	1
166. Corrosive Poisoning (intentional)...	—	—	—	—
167. Suicide by Gas Poisoning	—	—	—	—
Total carried forward ..	94,769	91,867	134,818	130,210

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ...	94,769	91,867	134,818	130,210
XIV.—*Affections produced by External Causes.*—(Contd.)				
168. Suicide by Hanging or Strangulation	1	—	1	—
169. Suicide by Drowning	1	—	1	—
170. Suicide by Firearms	—	—	—	—
171. Suicide by cutting or stabbing Instruments	—	—	—	—
172. Suicide by jumping from a height				
173. Suicide by crushing	—	—	—	—
174. Other Suicides	—	—	—	—
175. Food Poisoning— Botulism	—	—	—	—
176. Attacks of poisonous animals— Snake Bite	—	—	—	—
Insect Bite	10	12	14	15
177. Other accidental Poisonings ..	—	—	—	—
178. Burns (by fire)	40	39	52	60
179. Burns (other than by fire) ...	35	16	86	46
180. Suffocation (accidental)	—	—	—	—
181. Poisoning by Gas (accidental) ...	—	—	—	—
182. Drowning (accidental)	—	—	—	—
183. Wounds (by Firearms, war excepted)	—	—	—	—
184. Wounds (by cutting or stabbing Instruments)	635	355	949	471
185. Wounds (by fall)	290	163	459	291
186. Wounds (in mines or quarries) ...	—	—	—	—
187. Wounds (by machinery)	3	1	6	3
188. Wounds (by crushing *e.g.* railway accidents, etc.)	7	3	49	17
189. Injuries inflicted by animals, Bites, Kicks, etc.	124	46	179	68
190. Wounds inflicted on Active Service				
191. Executions of civilians by belligerents	—	—	—	—
192. A—Over Fatigue	—	—	—	—
B—Hunger or Thirst	—	—	—	—
193. Exposure to cold, Frost bite, etc. ...	—	—	—	—
194. Exposure to heat— Heatstroke	—	—	—	—
Sunstroke	—	—	—	—
Total carried forward ..	95,915	92,502	136,614	131,181

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
Brought forward ..	95,915	92,502	136,614	131,181
XIV.—*Affections produced by External Causes.*—(Contd.)				
195. Lightning Stroke	—	—	—	—
196. Electric Shock	—	—	—	—
197. Murder by Firearms	—	—	—	—
198. Murder by cutting or stabbing Instruments	—	1	—	1
199. Murder by other means	—	—	—	—
200. Infanticide (Murder of an infant under one year)	—	—	—	—
201. A—Dislocation	21	7	25	8
B—Sprain	74	22	85	28
C—Fracture	82	44	125	62
202. Other external Injuries	811	352	1,252	553
203. Death by violence of unknown cause	—	—	—	—
XV.—*Ill-Defined Diseases*				
204. Sudden Deaths [cause unknown]—				
205. A.—Diseases not already specified or ill-defined—				
Ascites	60	45	118	69
Œdema	48	34	60	50
Asthenia	5	6	6	7
Shock	—	—	—	—
Hyperpyrexia	—	4	—	4
Other	191	215	219	238
B.—Malingering	16	5	16	5
Total	97,223	93,237	138,520	132,206

DISEASES	Cases		Attendances	
	Male	Female	Male	Female
I.—Epidemic, Endemic & Infectious Diseases	43,193	40,296	61,982	56,214
II.—General Diseases not mentioned above	5,092	5,456	7,932	8,340
III.—Affections of the Nervous System and Organs of the Senses ..	3,646	3,803	5,904	6,112
IV.—Affections of the Circulatory System...	1,613	1,527	2,340	2,214
V.—Affections of the respiratory System	5,529	4,176	7,781	5,928
VI.—Diseases of the Digestive System	25,894	27,275	34,132	37,070
VII.—Diseases of the Genito-Urinary System (*non-venereal*)... ...	1,730	3,006	2,633	4,999
VIII.—Puerperal State	—	333	—	337
IX.—Affections of the Skin and Cellular Tissues	7,403	5,428	11,159	8,071
X.—Diseases of Bones and Organs of Locomotion (*other than Tuberculous*)	274	269	406	346
XI.—Malformations	2	—	2	—
XII.—Diseases of Infancy	81	116	125	182
XIII.—Affections of Old Age	312	281	422	396
XIV.—Affections produced by external Causes...	2,134	1,062	3,283	1,624
XV.—Ill-defined Diseases	320	309	419	373
TOTAL	97,223	93,237	138,520	132,206

APPENDIX XI

SUMMARY OF SANITARY WORK PERFORMED IN RURAL DISTRICTS DURING 1935

Districts	Number of premises visited	Notices served under Ord. 47 of 1925	Notices served under Reg. 183 of 1926	Notices served under Reg. 198 of 1907	Number of notices complied with	Number of notices not complied with	Slaughtering at Abattoirs: No. of public Abattoirs	Slaughtering at Abattoirs: No. of private Abattoirs	Slaughtering at Abattoirs: Oxen	Slaughtering at Abattoirs: Cows	Slaughtering at Abattoirs: Calves	Slaughtering at Abattoirs: Heifers	Slaughtering at Abattoirs: Pigs	Slaughtering at Abattoirs: Goats	Slaughtering at Abattoirs: Sheep	Slaughtering at Abattoirs: Fees collected	Cemeteries: No. of private	Cemeteries: No. of public	Cemeteries: No. of burials in public	Fees collected
																Rs. c.				Rs. c.
Pamplemousses ...	3,995	115	292	333	711	29	1	...	21	103	269	7	...	...	...	864.00	...	1	1,136	2,140.00
Rivière du Rempart ...	3,986	12	37	47	71	25	...	...	...	...	...	...	...	...	...	...	18	3	384	860.00
Flacq North Section ...	3,058	88	...	86	144	30	...	2	40	257	320	...	128	...	...	...	12	3	335	634.00
Flacq South Section ...	453	77	303	195	547	28	...	...	...	...	...	...	...	...	...	...	3	2	701	1,659.00
Mahebourg Section ...	10,015	99	118	15	218	14	1	...	76	153	197	11	112	461	6	1,447.75	8	2	419	611.00
Rose Belle Section ...	2,162	116	269	87	450	22	...	1	31	273	201	4	...	23	1	...	3	2	751	1,450.50
Savanne	10,820	93	86	407	582	4	1	...	61	95	95	8	...	...	...	590.00	2	3	814	1,702.50
Black River	3,095	70	146	67	245	8	...	1	425	238	...	...	...	...	...	...	..	3	285	546.50
Rose Hill Section ...	2,561	176	249	78	498	5	1	...	770	374	852	268	299	1,137	56	...	2	1	384	822.00
Vacoas Section ...	1,500	36	5	3	42	2	...	...	...	...	...	...	...	...	...	...	1	1	1,125	2,770.90
Curepipe Section ...	3,940	313	218	130	705	6	1	...	931	211	538	16	291	289	181	...	...	1	201	...
Moka	3,422	135	...	303	431	7	...	1	119	275	124	1	...	8	...	...	5	3	543	1,205.50
Total ...	49,007	1,330	1,723	1,801	4,644	180	5	5	2,474	1,979	2,596	315	830	1,918	244	2,901.75	54	25	7,078	14,401.90

Details of Contraventions Established during 1935.

Districts		Reg. 183 of 1926 (Pit and pail latrine.)	Reg. 198 of 1907—Conservancy and Sanitary management of villages.	Reg. 42 of 1934—(Milk.)	Ord. 8 of 1927—Slaughtering of cattle.	Reg. 820 of 1920—(Protection of foodstuffs.)	Ord. 47 of 1925—(Water nuisances.)	Reg. 61 of 1934—Public Market in Rural Districts.	Reg. 153 of 1926—(Tuberculosis Certificates.)	Reg. 164 of 1927-(Tuberculosis Certificates.)	Reg. 498 of 1900—(Slaughter-houses, meat shops)	Ord. 8 of 1898—Common form and Interpretation.	Ord. 6 of 1838—Penal Code in Mauritius.	Ord. 24 of 1932—Butcher's shops.	Reg. 19 of 1912—Deferred telegrams.	Reg. 153 of 1912—(Milk) Vide Reg. 42 of 1934.	Reg. 73 of 1908—(Abattoirs).	Reg. 134 of 1883—Washerman's Trade.	Reg. 83 of 1927—Pit and Pail Latrine.	Reg. 162 of 1885—Proclaimed villages.	Reg. 50 of 1914—Storing of fruits, dry grains, gunny bags.	Reg. 39 of 1921—Sale of Vegetables etc. under verandahs of buildings.	Reg. 27 of 1928—Bathing in River Tabac.	Amount of fines
																								Rs. c.
Pamplemousses	... ...	31	13	11	...	4	8	...	1	...	...	...	...	...	...	...	3	...	...	...	2	...	...	504.50
Rivière du Rempart	... ...	24	1	16	...	...	2	...	4	1	2	4	1	1	...	...	...	...	...	...	...	...	...	475.00
Flacq North Section	... ...	39	1	8	...	...	9	8	4	1	...	...	...	...	...	...	4	...	...	1	1	1	...	356.75
Flacq South ,,	... ...	267	29	3	...	5	12	...	14	...	...	...	...	...	...	1	1	...	...	...	...	...	...	100.25
Mahebourg ,,	... ...	169	1	8	...	3	1	17	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	163.50
Rose Belle ,,	... ...	33	8	43	...	15	7	...	14	...	...	...	...	...	...	...	1	...	...	...	...	...	2	863.50
Savanne ...	... ...	20	2	11	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	156.50
Black River	... ...	25	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21.00
Rose Hill Section	... ...	199	2	22	...	7	31	...	21	3	...	...	...	...	...	...	...	1	1	...	...	...	...	381.00
Vacoas ,	... ...	62	...	8	...	8	9	...	4	...	4	...	...	...	...	...	5	...	...	...	...	...	...	262.75
Curepipe ,,	... ...	20	5	...	...	...	24	...	1	...	...	...	...	...	1	2	...	...	...	...	...	...	...	9.00
Moka .	... ...	124	7	55	...	5	4	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	588.50
TOTAL ...	...	1,013	69	186	2	48	107	25	92	5	6	4	1	1	1	3	14	1	1	1	3	1	2	3,882.25

Report of the Government Medical Officer, Rodrigues for the Year 1935.

GENERAL

On the whole, it may be said that the year under review has been a satisfactory one for the Rodrigues population.

The two epidemic diseases, namely: Typhoid fever and Bacillary Dysentery which caused many deaths in 1934 have disappeared fom the Island. No sporadic case of either disease was met with during the current year.

The emigrants who suffered from Malaria and Beri-beri when they returned from Réunion have now completely recovered.

Medical and sanitary conditions in the Island are now back to normal as this year's statistics show.

The rainfall has been plentiful and the number of crops above the average: a very important point as the whole life of the community depends nearly entirely on Agriculture.

The next crops of " acacia " (leucæna glauca) and maize are very promising indeed and if a cyclone does not visit the Island, the outlook for the beginning of the year 1936 is very good.

VISIT OF HIS EXCELLENCY THE GOVERNOR

In September last, His Excellency the Governor of Mauritius and its dependencies accompanied by Lady Jackson, visited the Island.

Sir Wilfrid Jackson visited Port Mathurin Hospital on several occasions, many topics of interest were discussed during his visits.

His Excellency also attended the outpatient department for lepers and showed his usual keen interest in the welfare and treatment of these patients. His Excellency the Governor also paid a visit to Mount Lubin Dispensary.

VISIT OF THE HONOURABLE DIRECTOR OF THE MEDICAL AND HEALTH DEPARTMENT

The Honourable Director of the Medical and Health Department also visited the Island in September. His visit was seized upon for the discussion of numerous medical and sanitary subjects. These questions are reviewed in Report No.1233/35 dated 11th October 1935, from the Honourable Director of the Medical and Health Department to the Honourable the Colonial Secretary.

This Annual Report should be read in conjunction with the above mentioned report.

STAFF CHANGES

On the 20th of January 1935, I landed in Rodrigues and the next day I took over from Dr. E. H. Madge who left for Mauritius.

On the 23rd of May 1935, the temporary appointment of Mr. G. E. Kavat came to an end as he was recalled to Mauritius. His services as Assistant Dispenser at Port Mathurin Hospital were greatly appreciated by my predecessor and by myself.

HOSPITAL AND DISPENSARIES

Port Mathurin Hospital.—The Hospital was repainted throughout during the year, with the exception of the operating theatre which was built in the latter part of 1934.

A fence was put up to enclose the space at the back of Hospital and Bougainvilleas shrubs have just been planted to make a hedge.

A large number of the bottles in the pharmacy has been relabelled.

Dispensary attendances.—During the year 7,665 patients were seen at the dispensary attached to the hospital.

It should be noted that the Rodriguean asks for treatment as soon as he is ailing; when he cannot attend the hospital because he is in bed though not ill enough to call the Medical Officer, or when he is too busy looking after his plantation, he very often sends a relative or friend to consult for him.

Apparently, consultation in this manner has been in practice for a great number of years, needless to say that under such circumstances it is very difficult to make a correct diagnosis, though the relative or friend is put through a stiff cross-examination.

Admission and deaths.—During the year, 234 patients were admitted into the Hospital.

53 provided their own diets and received treatment only.

There were 8 deaths.

The following table shows the main diseases for which hospitalisation was necessary:

Anæmia and Senile debility	9	Intestinal obstruction	1
Ascariasis	6	Malaria Cachexia	3
Abscesses	34	Observation cases	3
Asthma, Influenza, bronchitis	19	Pleurisy	1
Beriberi	1	Quinsy and A. Tonsilitis	3
Burns	5	Parturition	9
Dental extraction	5	Pyelitis	3
Gastritis and Dyspepsia	4	Syphilis	4
Gonorrhoæ	5	Pulmonary Tuberculosis	16
Hysteria	4	Injury	47
Miscellaneous	52		

Vaccination.—During the year, 214 babies were vaccinated at the Hospital. Of these 181 were successfully performed. Two vaccination marks being obtained in each case.

Operations.—166 minor operations which required the use of a general anæsthetic were performed.

For the first time, ethyl chloride as a general anæsthetic has been freely used.

4 Major midwifery operations were done and there was one death.

Extraction of teeth.—A great number of teeth was extracted at Port Mathurin Hospital and at Mt Lubin Dispensary, but no record is kept.

MOUNT LUBIN DISPENSARY

Here also most of the bottles in the pharmacy were labelled.

Dispensary attendances.—The number of attendances during the year was 5,325.

Admisisons and deaths.—Though the hospital is closed, it was found necessary to admit 89 patients during the year. These patients provided their diet and were admitted for treatment only, consequently, there was no extra expense for the Government.

There were 3 deaths amongst the admitted cases.

The following table shows the main diseases for which admission was necessary :

Abscesses	24	Ascariasis	2
Asthma, Influenza, Bronchitis	9	Catarrhal jaundice	1
Malaria	1	Dyspepsia and Gastritis	3
Pulmonary tuberculosis	3	Dysentery and Enteritis	3
Pyelonephritis	1	Debility	3
Puerperal fever	1	Injury	23
Syphilis (Secondary)	1	Miscellaneous	14

The patient suffering from Malaria had contracted the disease in Mauritius.

Operations.—33 operations were performed. Two of them required the use of choloroform and 31 were done under Ethyl Chloride as a general or local anæsthetic.

Vaccination.—159 babies were vaccinated at the Dispensary and of these 140 were successful.

SUMMARY

	Port Mathurin Hospital	Mt Lubin Dispensary	Total
Number of admissions	234	89	323
,, dispensary attendances	7,665	5,325	12,990
,, vaccinations	214	159	373
,, Operations	166	33	199
,, Deaths	8	3	11

PATIENTS WHO REQUIRED TREATMENT IN MAURITIUS

Two patients were sent to Mauritius during the year. One was suffering from a carbuncle of neck complicated by diabetes. The other was suffering from extensive scalp wounds.

Both cases have recovered.

LEPROSY IN RODRIGUES

There are now 25 lepers in the Island, an increase of 3 over last year's figure. This increase is explained as follows :

Two cases who had emigrated to Mauritius in 1934 have come back to this Island, and one new case has been detected early this year. The new leper patient (No 25 of the synoptic table) is the third member of the family suffering from the disease.

The number of patients with positive nasal smears (seven in all) remains the same.

Sixteen patients are under treatment. A total of 1,184 injections was done to the lepers during the year.

One meeting of the Leprosy Board was held in July and no transfer to Mauritius was recommended.

The leprotic situation is well in hand and the patients continue to show their usual keenness for treatment.

The following synoptic table shows the grade, infectivity etc, ...of the Leper patients.

TABLE SHOWING GRADE, INFECTIVITY ETC., OF THE LEPER PATIENTS

Number	Initials	Age	Sex	Type	Grade 1934–35	Infectivity on clinical grounds	Nasal smear	Treatment	Remarks on present condition
1	F.R	27	M	Nodular	B 2	±	+	Yes ...	Statu quo
2	J.E	20	M	Nodular	B 1	±	+	Yes ...	No improvement
3	R.L	25	M	Nervous	A 1	O	.	No ..	Burnt out
4	B.M	19	M	Nervous	A 1	Very slight	—	Yes ...	Improving
5	S.A	32	M	Nodular	B 3	± ±	+	Yes ...	Statu quo
6	M.C	37	F	Nodular	B 2	±	+	Yes ...	Slight Improvement
7	N.B	62 ?	M	Nervous	A 1	O	.	No ...	Burnt out
8	E.R	42 ?	F	Nodular	A 3	±	—	Yes ...	Great improvement
9	C.P	32	F	Nervous	A 1	O	.	No ...	Apparently cured
10	D.E	51	M	Nodular	A 1	O	.	No ...	Burnt out
11	T.P	18	F	Mixed	B 3	± ±	+	Yes ...	No improvement
12	L.P	22	F	Nervous	A 1	O	—	Yes ...	Apparently cured
13	L.L	56	M	Mixed	A 1	O	.	Yes ...	Burnt out
14	L.L	30	F	Mixed	A 1	O	.	No ...	Apparently cured
15	A.R	51	M	Nervous	A 1	O	.	No ...	Apparently cured
16	D.R	41	M	Nervous	A 1	Very slight	—	Yes ...	Progressing satisfactorily
17	M.M	47 ?	M	Mixed	A 1	O	.	No ...	Apparently cured
18	E.A	26	F	Nervous	A 1	O	—	No ...	Apparently cured
19	F.L	32	M	Nervous	A 1	Very slight	—	Yes ...	Progressing satisfactorily
20	J.L	14	M	Nervous	A 2	Very slight	—	Yes ...	Slight improvement
21	O.P	22	F	Nervous	A 1	O	.	No ...	Apparently cured
22	L.L	15	F	Nervous	A 1	Very slight	—	Yes ...	Progressing satisfactorily
23	Mrs H.M	49	F	Nodular	B 1	±	+	Yes ...	Doing well
24	A.R	13	F	Mixed	B 2	±	+	Yes ...	Doing well
25	R.M	15	M	Nervous	A 2	Very slight	—	Yes ...	Progressing satisfactorily

The numbers 3 and 10 returned from Mauritius during the year.

ASCARIASIS

It is no exaggeration to say that every man, woman and child in the Island is heavily infected with Ascaris lumbricoides. The youngest patient was found to be six months old and the oldest 71 years old.

The main drug used as a vermifuge is Oleum Chenopodium which gives excellent results. The Rodriguean also uses the extract from the leaves of Chenopodium sp: which grows wild in the Island. This practice which is done on a small scale is very strongly discouraged as the dosage is empirical. At the same time the patients are being told to take the drug more often, but under medical supervision.

The infection with the Round worm is so widespread that it has been decided to dispense the drug free of charge.

BIRTHS

419 babies were born during the year, an increase of 38 over last year's figure. The number of stillbirths 8.

29 confinements required the attendance of the Medical Officer, giving an average of about one confinement for every fortnight.

DEATH RATE AND CAUSES OF DEATHS

During the year there were 109 deaths in the Island, as compared with 183 in 1934 (the year of epidemics) and 103 in 1933.

The death rate is now 10.6 per 1,000 as compared to 20.7 last year and 12.7 in 1933.

The following table shows the main causes of death during the year.

CAUSES OF DEATH

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Ascariasis and toxicœdema ...	—	—	—	—	—	1	2	—	1	3	—	2	9
Atelectasis ...	—	—	—	2	1	—	—	—	—	—	—	—	3
Bronchitis and broncho-pneumonia ...	1	1	—	4	5	2	1	2	2	6	1	1	26
Enteritis and dysentery ...	1	—	2	—	—	—	—	—	—	1	—	—	4
Gastro enteritis ...	—	—	3	1	2	—	—	—	—	—	—	—	6
Infantile debility ...	2	—	—	—	—	1	—	—	—	—	—	—	3
Post partum infective jaundice ...	1	—	—	—	—	—	—	—	—	—	—	—	1
Senile debility ...	1	—	—	—	—	—	—	—	—	—	—	—	1
,, myocarditis ...	—	—	2	1	1	—	—	1	1	—	1	—	7
Septicæmia following abortion ...	—	—	1	—	—	—	—	—	—	—	—	—	1
Pulmonary Tuberculosis ...	1	1	—	—	4	1	2	—	1	1	2	—	13
Prematurity ...	—	—	—	—	1	1	1	3	1	—	2	—	9
Miscellaneous ...	—	—	—	2	4	5	3	1	2	5	2	2	26
													109

It is of interest to point out that the increase in the population during the current year is just over 300 and also that during the last three years the number of births has exceeded the number of deaths by 777.

DUTIES AS POLICE MEDICAL OFFICER

During the year, six members of the Police Force reported sick and were seen in their quarters and a total of 28 days leave was granted.

Sixty one prisoners were examined at Port Mathurin Hospital and treatment was given.

Eight prisoners were admitted at the Hospital.

No death was recorded.

DUTIES AS PORT HEALTH OFFICER

26 ships entered Port Mathurin Harbour during the year. They were all admitted to free pratique.

Special care was taken when dealing with ships coming from certin ports of the Far East where some endemic diseases have lately made their reappearance.

The question of quarantine in this Island is fully dealt with in the Honourable Director of Medical and Health Department report already mentioned.

WATER SUPPLY

During December the construction of a dam across Cascade Pigeon River was started. The reservoir is nearing completion and will be ready for use in the early months of 1936.

A satisfactory supply of water as far as quantity is concerned will thus be stored for Port Mathurin. As regards quality there will be no improvement on the former supply for after every heavy rainfall, muddy water will still be running from the taps for about four days. Unfortunately to alter such conditions no cheap scheme can be put forward. It will be necessary " to wait until the general financial situation of the Colony improves."

INVESTIGATION WORK

During the year, steps were taken to identify the species of rats found in the Island.

The inhabitants are very keen on borrowing the rat traps but it has been found nearly impossible to impress upon them that the live rat should be brought to the hospital for identification.

Two specimens were sent to Dr. A. R. D. Adams who very kindly identified them as *Mus rattus rattus* and *Mus rattus norvegicus*.

Though the number of rats obtained so far is rather small, it can be said with some confidence that the Mus rattus norvegicus is more common than the Mus rattus rattus. The survey is still being carried on and it is hoped that more rats will be received in the future. ...

CONCLUSION

Comparing this year's results with those of the year 1933, one can safely say that the sanitary conditions in Rodrigues are back to normal and that " the effects of the unfortunate experiment made in Emigration some years ago have now passed and that the Island has made a complete recovery."

Various recommendations were submitted to the Honourable Director of the Medical and Health Department during his visit. His views are endorsed in his report already mentioned.

Finally I desire to acknowledge the constant courtesy of the Magistrate Pierre Rousset, Esquire, to whom I tender my very best thanks.

My sincere appreciation of their services is offered to the Dispensers F, Larché and L. Joseph who have shown an unfailing devotion to duty.

F. LETELLIER,
Ag. G. M. O. Rodrigues.

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